CITY OF DURBAN

Annual Report

OF

CITY MEDICAL OFFICER OF HEALTH

YEAR ENDING 30th JUNE, 1945

HAYNE & GIBSON (PTY) LTD.,
DURBAN
1946

CITY HEALTH DEPARTMENT.

1st August, 1945.

To His Worship the Mayor and
City Councillors of the City of Durban.

Mr. Mayor, Ladies and Gentlemen,

I have the honour to present the Forty-Fourth Annual Report of the activities of the City Health Department during the year ended 30th June, 1945.

CLIMATIC DATA. **Latitude:** 30 degrees. **Longitude :** 31 degrees.

Temperature : (Statistics kindly supplied by the City and Water Engineer :—

1944/45	Temperature Average. 9 a.m.	Humidity Maximum. 9 a.m.	Rainfall.
July	73.2	69	1.29
August	74.9	79	.63
September	74.5	80	5.16
October	77.9	78	3.21
November	79.3	79	2.55
December	81.5	77	2.13
January, 45	81.6	78	2.51
February	83.7	84	6.60
March	81.4	81	7.99
April	80.5	78	.45
May	76.7	73	2.04
June	71.7	64	.02
			34.58

AREA OF MUNICIPALITY : The area of Durban and Suburbs inclusive of Townlands is 43,124 acres (67.38 sq. miles). The City is built on ground rising from sea level, being backed by hills running north and south, the soil of the valleys being very fertile.

ANNUAL RATEABLE VALUES :

Gross value of land	£21,371,930	(£21,130,840)
Gross value of buildings	£35,386,100	(£33,553,970)
Total :	£56,758,030	(£54,684,810)

For the year under review, the rates imposed were 7½d. on land and 3¾d. on buildings (including water rate).

REPORT "A."

1. VITAL STATISTICS :

POPULATION :

	Census May, 1936.	Estimated at 30th June, 1945.	
European	88,065	109,460	(108,245)
Coloured	7,336	8,986	(8,773)
Natives	63,762	71,856	(72,305)
Asiatics	80,384	99,156	(96,683)
	239,547	289,458	(286,006)

The principal Vital Statistics (previous year in brackets), corrected for outward transfer, are:—

	European	Coloured	Native	Asiatic	Total
Population (Estimate 30/6/45)	109,460 (108,245)	8,986 (8,773)	71,856 (72,305)	99,156 (96,683)	289,458 (286,006)
Birth Rates	21.32 (23.44)	48.96 (49.01)	33.23 (26.89)	46.36 (46.87)	33.71 (33.03)
Death Rates	9.48 (9.71)	23.60 (25.42)	40.43 (40.44)	19.72 (22.06)	21.11 (22.14)
Infantile Mortality Rate per 1,000 live births	29.99 (36.65)	131.81 (157.40)	388.70 (383.54)	99.19 (112.75)	155.02 (150.12)
Percentage of illegitimate to live births	3.64 (2.96)	30.91 (25.92)	58.85 (49.99)	1.26 (0.69)	17.25 (12.54)
Death Rate Pulmonary Tuberculosis per 1,000 of population	0.38 (0.39)	4.78 (5.24)	6.21 (5.06)	2.19 (2.40)	2.58 (2.40)

NOTE: In the absence of a census figure, the Native population is determined by the difference between the births and deaths; the number, however, is estimated to be in the neighbourhood of 100,000.

BIRTHS : The following births were registered in Durban during the year (figures for previous year in brackets):

	European		Coloured		Native		Asiatic		Total	
Local Births	2,334	(2,537)	440	(432)	2,388	(1,945)	4,597	(4,532)	9,759	(9,446)
Local illegitimate births	85	(75)	136	(112)	1,405	(972)	58	(27)	1,684	(1,186)
Still births	67	(60)	25	(20)	264	(247)	204	(227)	560	(554)
BIRTH RATES :	21.32	(23.40)	48.96	(49.0)	*33.23	(26.9)	46.36	(46.90)	33.71	(33.03)

*This figure is inaccurate and unreliable owing to incomplete registration of births.

Rates of natural increase, being the excess of births over deaths in proportion to population are as follows :

European	11.8	(13.7)	per 1,000
Coloured	25.4	(23.8)	,, ,,
Asiatic	26.6	(24.8)	,, ,,

Illegitimacy accounted for 2.7 (2.9) per cent. of the total European births, 15.4 (25.9) for Coloureds, 6.9 (49.9) for Natives and 0.6 (0.6) for Asiatics.

DEATHS:

	European		Coloured		Native		Asiatic		Total	
Local deaths all ages	1,038	(1,052)	212	(223)	2,905	(2,924)	1,956	(2,133)	6.111	(6,332)
Non-local residents	222	(282)	20	(28)	1,620	(1,409)	155	(111)	2,017	(1,830)
Death Rates	9.4	(9.7)	23.6	(25.4)	40.4	(40.4)	19.7	(22.0)	21.11	(22.14)

INFANTILE MORTALITY :

	European		Coloured		Native		Asiatic		Total	
Local deaths	70	(93)	58	(68)	929	(746)	456	(511)	1,153	(1,418)
Death of infants whose mothers came to Durban for confinement or were brought in suffering from illness which caused death ...	15	(22)	5	(6)	524	(555)	24	(46)	568	(629)

The European infantile mortality rate per 1,000 was 29.99 (36.65); Coloured 131.81 (157.40); Native 388.70 (383.54) and Asiatic 99.19 (112.75).

Causes of death were as follows :

	European		Coloured		Native		Asiatic		Total	
Congenital Causes	16	(10)	8	(9)	118	(123)	103	(81)	245	(223)
Prematurity	24	(17)	8	(12)	80	(38)	47	(60)	159	(127)
Diarrhoea etc.	6	(18)	18	(13)	281	(290)	70	(119)	375	(440)
Bronchitis & Pneumonia	10	(20)	12	(20)	330	(198)	171	(192)	523	(430)
Others	14	(28)	12	(14)	120	(97)	65	(59)	211	(198)
	70	(93)	58	(68)	929	(746)	456	(511)	1,513	(1,418)

	European		Coloured		Native		Asiatic		Total	
Births, Male	1,217	(1,307)	233	(233)	1,234	(1,025)	2,335	(2,285)	5,019	(4,850)
,, Female	1,117	(1,230)	207	(199)	1,154	(920)	2,262	(2,247)	4,745	(4,596)
Infantile Deaths :										
Male	41	(51)	32	(31)	486	(394)	218	(280)	777	(756)
Female	29	(42)	26	(37)	443	(352)	238	(231)	736	(662)
Still Births :										
Local	58	(60)	15	(20)	171	(247)	146	(227)	390	(554)
Imported	4	(9)	2	(—)	170	(166)	6	(15)	182	(190)
Illegitimate Births :										
Local	85	(75)	136	(112)	1,405	(972)	58	(27)	1,684	(1,186)
Imported	8	(5)	11	(4)	1,068	(774)	4	(3)	1,091	(786)

The following tables show the percentage of Deaths at various age periods for Europeans

Age Period :	Number of Deaths.		Percentage of Total Deaths.	
Under 1 year	74	(105)	7.1	(10.0)
1 — 2 years	17	(15)	1.7	(1.4)
2 — 5 years	13	(17)	1.2	(1.6)
0 — 5 years	104	(137)	10.0	(13.0)
5 —15 years	13	(21)	1.2	(2.0)
15 —25 years	20	(19)	2.0	(1.8)
25 —45 years	80	(119)	7.8	(11.3)
45 —65 years	358	(313)	34.4	(29.8)
65 years and over	463	(443)	44.6	(42.1)
Total	1,038	(1,052)		

The following table indicates the percentage of all deaths in age groups :

	European			Coloured			Native			Asiatic			Total		
	M	F	%	M	F	%	M	F	%	M	F	%	M	F	%
Under 1	44	30	7.1	35	28	29.8	520	475	34.2	230	258	24.9	829	791	26.5
1 — 2	8	9	1.7	12	6	8.5	235	227	15.9	80	112	9.8	335	354	11.3
3 — 5	6	7	1.2	3	5	3.7	65	83	5.1	52	72	6.3	126	167	4.8
0 — 5	58	46	10.0	50	39	42.0	820	785	55.2	362	442	41.0	1,290	1,312	42.6
6 — 15	9	4	1.2	4	5	4.4	42	52	3.2	51	63	5.9	106	124	3.7
16 — 25	8	12	2.0	8	13	9.9	107	108	7.3	85	112	10.0	208	245	7.4
26 — 45	39	41	7.8	20	22	19.9	434	209	22.2	136	150	14.6	629	422	17.2
46 — 65	219	139	34.4	15	14	13.8	215	68	9.8	194	122	16.2	643	343	61.2
Over 65	258	205	44.6	12	10	10.0	40	25	2.3	127	112	12.3	437	352	12.9
	591	447		109	103		1,658	1,247		955	1,001		3,313	2,798	

DEATHS FROM CERTAIN MAIN CAUSES — EUROPEANS.

Disease :	Number of Deaths.		Percentage of Total Deaths.	
Infective Intestinal Diseases (Enteric Fever, Dysentery, Diarrhoea and Enteritis	12	(35)	1.2	(3.3)
Cancer	148	(124)	14.3	(11.6)
Heart and Circulatory System	289	(271)	27.8	(25.8)
Diseases of the Nervous System	99	(138)	9.5	(13.1)
Diseases of Birth and Early infancy	86	(86)	8.3	(8.1)
Pneumonia and Bronchitis	61	(90)	5.8	(8.5)
Pulmonary Tuberculosis	42	(43)	4.0	(4.1)
Other Tuberculosis	1	(5)	0.09	(0.4)
Urinary and Genital Systems	72	(57)	6.8	(5.4)

MAIN CAUSES OF DEATH : CITY CASES ONLY.

(Figures for 1943/44 in brackets)

	E.		C.		N.		A.	
1. **Cancer :** Site of Disease—								
Buccal Cavity and Pharynx	1	(2)	—	(—)	—	(2)	1	(2)
Oesophagas	5	(7)	1	(—)	—	(1)	—	(2)
Stomach and Duodenum	60	(29)	2	(4)	5	(5)	22	(9)
Rectum	5	(9)	—	(—)	2	(—)	—	(3)
Liver	7	(9)	2	(—)	6	(7)	1	(1)
Pancreas	5	(3)	—	(—)	2	(1)	—	(1)
Other Digestive Organs	—	(3)	—	(—)	—	(1)	—	(1)
Larynx	7	(5)	1	(—)	—	(1)	1	(—)
Lung	7	(7)	—	(—)	1	(1)	—	(1)
Uterus	8	(7)	—	(—)	1	(1)	2	(5)
Other Female Genital Organs	5	(3)	1	(—)	—	(—)	2	(3)
Breast	10	(10)	2	(—)	1	(—)	—	(—)
Prostate	4	(5)	—	(—)	1	(—)	2	(1)
Male Genital Organs	1	(—)	—	(—)	—	(—)	—	(—)
Male and Female Urinary Organs	12	(5)	2	(—)	6	(1)	3	(4)
Other Organs	11	(18)	—	(—)	3	(5)	4	(2)
TOTAL	148	(122)	11	(4)	28	(26)	38	(35)

	E.		C.		N.		A.	
2. **Diseases of the Heart**	123	(125)	13	(12)	68	(73)	120	(123)
3. **Bronchitis, Pneumonia**	62	(73)	23	(35)	626	(549)	514	(639)
4. **Influenza**	1	(2)	—	(—)	2	(5)	—	(2)
5. **Typhoid**	2	(6)	1	(—)	19	(37)	6	(11)
6. **Appendicitis**	4	(2)	—	(1)	3	(3)	2	(3)
7. **Tuberculosis**	42	(43)	43	(46)	446	(366)	233	(232)
8. **Diabetes**	23	(25)	—	(1)	—	(1)	11	(21)
9. **Apoplexy**	55	(57)	1	(7)	14	(15)	36	(36)

		E.		C.		N.		A.	
10.	Diseases of the Kidneys—								
	Nephritis	41	(48)	8	(4)	38	(32)	65	(84)
	Other diseases of kidneys	21	(8)	1	(1)	7	(2)	8	(9)
11.	Diseases of the Liver	11	(12)	2	(4)	17	(13)	16	(13)
12.	Accidents of Parturition	5	(4)	1	(—)	13	(13)	25	(15)
13.	Old Age	37	(42)	3	(3)	33	(5)	54	(40)
14.	Suicide—								
	Poisoning	10	(3)	—	(—)	—	(—)	4	(3)
	Hanging or strangulation	2	(2)	1	(—)	5	(3)	4	(7)
	Drowning	—	(2)	—	(1)	—	(3)	2	(1)
	Firearms	2	(1)	—	(—)	—	(—)	—	(—)
	Cutting or piercing insruments	—	(1)	—	(—)	—	(2)	1	(3)
15.	Accidents								
	Railways	3	(5)	2	(—)	3	(6)	1	(2)
	Motor-driven vehicles	9	(7)	—	(3)	20	(22)	9	(19)
	Absorption of gases	—	(—)	—	(—)	1	(2)	1	(1)
	Burns	2	(1)	2	(—)	15	(4)	47	(38)
	Injury by firearms	—	(—)	—	(—)	1	(1)	—	(—)
	Cutting or piercing insruments	—	(1)	—	(—)	1	(—)	—	(—)
	Fall	13	(10)	3	(—)	17	(10)	1	(2)
	Drowning	5	(4)	—	(—)	8	(4)	6	(7)
	Other	4	(1)	3	(—)	9	(1)	—	(—)

CAUSES OF DEATH

Code.	Disease.	Borough				Imported			
		E.	C.	N.	A.	E.	C.	N.	A.
	Diseases due to Bacteria—								
001	Typhoid Fever	2	1	19	6	1	—	32	6
008	Cerebo spinal meningitis	—	—	—	3	—	—	—	—
011	Whooping Cough	1	1	7	5	—	1	5	—
012	Diphtheria	6	1	9	2	3	—	16	—
014	Tetanus	4	—	17	—	—	—	8	—
015	T.B. Respiratory System	42	43	446	233	14	1	314	22
016	„ Central nervous system	1	1	7	4	1	1	10	1
017	„ Intestines and peritoneum	—	—	7	15	—	—	7	1
018	„ (Vertebral Column)	—	—	1	1	—	—	1	1
019	Other bones and joints	—	—	1	—	—	—	—	—
020	Skin	—	—	—	—	—	—	—	—
021	Lymphatic system	—	—	—	—	—	—	—	—
022	Genito-Urinary system	—	—	—	1	—	—	—	—
023	T.B. other organs	—	—	—	—	—	—	—	—
024	T.B. Miliary	—	5	24	4	2	—	21	2
	Dysentery—								
032	Dysentery : bacillary	1	7	107	16	1	1	62	1
033	do. : amoebic	2	2	186	7	1	—	93	5
	Diseases due to Protozoa—								
036	Malaria	—	—	—	—	2	—	1	1
037	Blackwater Fever	1	—	—	1	—	—	—	—
	Diseases due to Spirochaetes—								
043	Congenital Syphilis	1	1	29	6	1	—	24	1
044	Syphilis, other forms	—	—	10	4	1	—	11	—
	Diseases due to filterable Viruses—								
049	Infuenza without respiratory complications	1	—	2	—	—	—	4	—
050	Smallpox	1	6	39	47	1	1	53	9
053	Acute Poliomyelitis	3	—	5	4	2	—	1	3
054	Encephalitis	—	—	—	1	—	—	—	—
065	Typhus	1	—	—	—	—	—	2	—
	Cancer and Other Tumours—								
100	Buccal Cavity — Pharynx	1	—	—	1	2	—	1	—
101	Cancer of Oesophagus	5	1	—	—	2	—	—	—
102	„ „ Stomach and Duodenum	60	2	5	22	7	1	4	1
103	„ „ Rectum	5	—	2	—	2	—	1	—
104	„ „ Liver	7	2	6	1	2	—	9	—
105	„ „ Pancreas	5	—	2	—	2	—	1	—
106	„ „ other Digestive Organs	—	—	—	—	—	—	—	—
107	„ „ Larynx	7	1	—	1	1	—	1	—
108	„ „ Mediastinum	—	—	—	—	—	—	—	—
109	„ „ Lung	7	—	1	—	5	—	1	2
110	„ „ Uterus	8	—	1	2	3	—	2	—
111	„ „ Other female genital organs	5	1	—	2	1	—	—	—
112	„ „ Breast — Male or Female	10	2	1	—	—	—	2	—
113	„ „ Prostate	4	—	1	2	—	1	—	—
114	Male Genital organs	1	—	—	—	—	—	—	—
115	Male and Female Urinary Organs	12	2	6	3	1	—	1	—
116	Skin	1	—	—	—	—	—	—	—
117	Brain and other parts of Nervous System	3	—	—	—	—	—	1	—
118	Bones	1	—	1	1	—	—	—	—
119	Unspecified organs	3	—	2	2	1	—	1	—
135	Tumour of the Brain	3	—	—	1	1	—	2	—

Code.	Disease.	Borough E.	Borough C.	Borough N.	Borough A.	Imported E.	Imported C.	Imported N.	Imported A.
	General and Vitamin deficiency diseases—								
149	Acute rheumatic fever	2	—	2	3	1	—	—	—
150	Chronic rheumatism	4	—	1	4	—	—	—	—
152	Diabetes	23	—	—	11	4	—	2	3
154	Simple Goitre	1	—	1	2	—	—	—	—
163	Malnutrition	4	4	110	49	—	1	138	5
164	Other general diseases	1	—	—	—	—	—	—	—
167	Beri-Beri	—	—	—	—	—	—	1	—
168	Pellagra	—	1	4	1	—	—	3	—
169	Rickets	—	—	1	—	—	—	—	—
	Diseases o fthe Blood—								
203	Pernicious Anaemia	3	—	5	4	—	—	2	—
206	Other Anaemias	—	—	—	1	—	—	—	—
207	Leukaemia	3	—	—	4	—	—	2	—
	Chronic Poisoning and Alcoholism—								
250	Acute Alcoholism	2	1	—	2	—	—	—	—
251	Chronic Alcoholism	7	—	—	1	2	—	—	—
258	Unspecified Poisoning	6	2	6	12	1	—	5	—
	Diseases of the Nervous System—								
300	Intra-cranial abscess	—	—	—	—	—	—	—	—
301	Other forms	1	—	—	2	—	—	1	—
302	Pneumoccal Meningitis	2	1	1	3	1	—	—	1
303	Meningitis — other forms	4	—	8	14	3	—	4	1
305	Cerebral haemorrhage	55	1	14	36	11	1	6	2
306	Cerebral embolism and thrombosis	27	—	5	17	2	—	3	1
307	Hemiplegia	2	—	2	15	2	—	2	—
309	Epilepsy	1	—	7	4	—	—	3	—
310	Convulsions	4	1	1	11	—	—	4	1
312	Neuritis	—	—	—	2	—	—	1	—
313	Paralysis agitans	2	—	—	—	2	—	—	—
314	Disseminated sclerosis	—	—	—	1	—	—	—	—
315	Other diseases of nervous system	1	—	—	—	—	—	—	—
317	Diseases of the Mastoid process	—	1	5	3	—	1	1	—
	Diseases of Circulatory System—								
350	Chronic Pericarditis	—	—	2	—	—	—	2	—
351	Other Pericarditis	—	—	2	1	—	—	2	—
352	Acute Endocarditis	3	1	5	4	1	—	2	2
353	Valvular disease	5	—	5	8	5	—	2	1
356	Chronic Myocarditis	8	—	4	6	3	—	4	2
357	Other Chronic myocarditis	96	12	50	100	19	—	41	5
358	Angina pectoris	5	—	—	—	1	—	—	—
359	*Heart disease—rheumatic	1	—	—	—	—	—	2	—
360	Heart Disease not specified as Rheumatic	5	—	—	1	1	—	—	1
361	Aneurysm	—	2	—	1	—	1	—	—
362	Arterio Sclerosis	114	4	18	48	14	—	11	8
363	Gangrene	1	—	—	—	—	—	—	1
364	Other Diseases of the Arteries	4	—	11	3	2	—	1	1
365	Diseases of the veins	1	—	—	—	—	—	—	—
366	Lymphatic system	—	—	1	—	—	—	1	—
367	High blood pressure	1	1	—	5	—	—	—	2
368	Hypotension	45	3	22	17	4	—	22	1
	Diseases of Respiratory System—								
401	Diseases of Larynx	1	—	1	—	—	—	—	1
402	Bronchitis—acute	6	2	91	113	1	1	38	—
403	Bronchitis—chronic	3	1	9	51	—	—	2	1
404	Pneumonia—broncho	36	14	465	262	10	3	162	5
405	„ —lobar	16	6	60	88	2	—	13	—
406	„ —unspecified	—	—	—	—	1	—	—	—
407	Empyema	—	—	4	1	1	—	1	—
408	Pleurisy—unspecified	1	—	7	2	1	—	—	—
410	Congestion of lungs	9	—	9	7	3	—	3	1
411	Asthma	18	—	4	26	3	—	5	2
412	Pulmonary emphysema	—	—	1	—	—	—	1	1
413	Miners Phthisis	3	—	—	—	—	—	—	—
417	Abscess of lung	2	—	1	1	—	1	6	—
	Diseases of Digestive System—								
451	Septic Sore Throat	1	—	—	—	—	—	—	1
452	Other diseases of pharynx and tonsils	—	—	—	—	—	—	1	—
455	Ulcer of stomach	8	—	1	3	4	—	1	—
456	Ulcer of duodenum	4	1	—	3	—	—	—	—
457	Other diseases of the stomach	2	—	3	1	1	—	1	—
458	Diarrhoea and enteritis under 2 yrs.)	6	23	463	91	2	2	147	4
459	Diarrhoea and enteritis over 2 yrs.)	1	1	61	21	1	—	7	—
461	Appendicitis	4	—	3	2	3	—	2	—
462	Hernia	5	—	—	—	—	—	—	1

Code.	Disease.	Borough				Imported			
		E.	C.	N.	A.	E.	C.	N.	A.
463	Intestinal obstruction	8	1	7	4	3	—	4	—
466	Cirrhosis of liver with alcholism	3	—	1	3	—	—	—	—
467	Cirrhosis of liver without alcholism	4	1	4	5	—	—	5	1
468	Acute yellow atrophy of liver	2	—	7	5	—	—	2	—
469	Other diseases of the liver	2	1	5	3	—	—	1	—
471	Cholecystitis	1	—	—	1	—	—	—	—
472	Diseases of the pancreas	4	—	2	—	2	—	2	—
473	Peritonitis without stated cause	6	1	15	14	4	—	6	1
	Diseases of the Urinary and Genital Systems—								
500	Acute nephritis	11	3	18	32	1	1	16	2
501	Chronic nephritis	27	5	18	29	4	—	15	5
502	Nephritis—unspecified	3	—	2	4	—	—	2	—
503	Pyelitis, pyelonephritis	7	1	7	7	1	—	4	1
504	Other diseases of the Kidneys	14	—	—	1	2	—	2	—
506	Cystitis	1	—	—	1	—	—	—	—
507	Other diseases of the bladder	4	—	5	2	1	—	2	1
508	Diseases of the Urethra	—	—	—	1	—	—	—	—
510	Other diseases of the prostate	3	—	1	1	2	—	—	1
512	Diseases of the ovaries	2	—	1	—	—	—	—	—
513	Diseases of the uterus	—	—	—	3	—	—	1	—
	Diseases of Pregnancy—								
550	Abortion—unspecified origin	—	—	1	—	—	—	—	—
551	Abortion, induced other than therapeutic reasons	—	1	1	1	—	—	1	—
554	Ectopic gestation	—	—	2	1	—	—	1	—
556	Accidental Haemorrhage	—	—	—	1	—	—	—	—
558	Eclampsia of Pregnancy	—	—	1	4	—	—	1	1
559	Albuminuria of Pregnancy	—	—	—	1	—	—	—	—
573	Other puerperal toxaemias	—	—	2	8	—	—	6	—
574	Other acidents of childbirth	5	1	8	10	—	—	11	2
	Diseases of the Skin and Cellular Tissue—								
601	Cellulitis, acute abscess	1	—	4	2	—	—	5	2
	Diseases of the Bones and organs of movement—								
650	Osteomyelitis	—	—	1	—	—	—	1	—
651	Other diseases of the bones	1	—	—	1	—	—	—	—
652	Diseases of the Joints	—	—	—	—	—	—	1	—
653	Diseases of other organs of movement	—	—	—	—	—	—	—	1
	Congenital Malformations—								
700	Congenital hydrocephalus	—	—	—	1	—	—	—	—
701	Spina Bifida	—	—	2	1	1	—	1	—
703	Monstrosities	—	—	—	—	—	—	1	—
705	Cleft palate, harelip	1	—	—	—	—	—	—	1
706	Imperforate anus	—	—	1	—	—	—	—	—
708	Other Malformations	—	—	—	—	—	—	—	1
	Diseases Peculiar to the First Year of Life—								
750	Congenital debility	6	2	88	81	4	—	53	1
751	Premature birth	28	9	100	48	3	—	47	—
752	Haemorrhage — birth injury	5	3	21	16	1	—	12	2
754	Asphyxia during or after birth	3	—	—	5	—	—	2	—
758	Other specified diseases	6	3	21	22	2	—	10	1
800	Senility (age 65 and over)	37	3	33	54	6	—	22	4
	Violent or Accidental Deaths—								
850	Suicide: Poisoning	10	—	—	4	1	—	—	—
856	„ Hanging or strangulation	2	1	5	4	—	—	1	—
857	„ Drowning	—	—	—	2	—	—	—	—
858	„ Firearms and explosives	2	—	—	—	—	—	—	—
863	„ Unspecified Means	—	—	—	1	—	—	—	—
	Homicide—								
866	„ by cutting or piercing instruments	1	—	12	1	—	—	3	—
867	„ by unspecified means	—	1	—	—	—	—	—	—
	Accidental Deaths—								
868	Accidents on railways	3	2	3	1	2	—	2	—
871	„ motor-driven vehicles	9	—	20	9	1	—	5	—
874	By motor-driven Cycles	—	1	—	—	1	—	—	—
877	By Pedal Cycles	—	—	1	—	—	—	2	—
886	Injury by machinery	—	—	2	—	—	—	—	—
888	Accidental absorption of gases	—	—	1	1	—	—	—	—
891	„ burns	2	2	15	47	1	—	9	7
892	„ mechanical suffocation	1	1	4	—	—	—	—	—
893	„ drowning	5	—	8	6	1	—	4	—
894	„ injury by firearms	—	—	1	—	—	—	—	1

Code.	Disease.	Borough E.	Borough C.	Borough N.	Borough A.	Imported E.	Imported C.	Imported N.	Imported A.
895	Accident by Cutting or Piercing Instrument	—	—	1	—	—	—	—	—
896	„ injury by fall	13	3	17	1	1	1	1	—
897	Accidental crushing	1	—	—	—	—	—	—	—
904	Accidents due to electric currents	—	—	—	—	1	—	—	—
906	Anaesthetic accidents	2	1	2	—	—	—	2	—
916	Open verdict	—	—	2	—	—	—	—	—
951	Ill-defined causes	6	3	12	32	3	—	4	8
952	Found dead — cause unknown	1	—	—	—	1	—	—	—
	TOTAL	1038	212	2,905	1,948	222	20	1,620	155

DEATHS — VARIOUS: The following tables set out the deaths in age and race groups of various diseases:—

	Under 1	1-2	3-5	6-15	16-25	26-45	46-65	Over 65	Total
EUROPEAN:									
Enteric	—	—	1	—	—	—	1	—	2
Pulmonary Tuberculosis	—	1	1	—	3	13	14	10	42
Malnutrition	—	—	—	—	—	—	—	—	—
Dysentery and Enteritis	5	1	—	1	—	—	1	2	10
Bronchitis and Pneumonia	11	6	—	3	—	6	18	45	89
TOTAL	16	8	2	4	3	19	34	57	143
COLOURED:									
Enteric	—	—	—	—	—	1	—	—	1
Pulmonary Tuberculosis	3	3	2	4	10	15	5	1	43
Malnutrition	3	1	—	—	—	—	—	—	4
Dysentery and Enteritis	19	8	—	—	—	3	2	1	33
Bronchitis and Pneumonia	11	5	3	—	1	—	1	2	23
TOTAL	36	17	5	4	11	19	8	4	104
NATIVE:									
Enteric	2	1	1	2	2	9	1	1	19
Pulmonary Tuberculosis	7	21	17	22	82	203	83	11	446
Malnutrition	45	45	13	6	1	3	2	2	117
Dysentery and Enteritis	306	194	58	16	33	148	56	6	817
Bronchitis and Pneumonia	326	142	60	21	20	52	18	10	649
TOTAL	686	403	149	67	138	415	160	30	2,048
ASIATIC:									
Enteric	—	2	—	2	1	1	—	—	6
Pulmonary Tuberculosis	3	3	9	25	82	91	17	3	233
Malnutrition	24	13	6	1	—	—	1	—	45
Dysentery and Enteritis	59	36	10	5	2	4	6	7	129
Bronchitis and Pneumonia	176	96	67	30	25	34	57	51	536
TOTAL	262	150	92	63	110	130	81	61	949

2. INFECTIOUS DISEASES NOTIFIED DURING THE YEAR:

(Figures for previous year in brackets).

	European		Coloured		Native		Asiatic	
(a) Formidable Epidemic Diseases:								
1. Smallpox.								
Local cases	1	(—)	17	(1)	114	(53)	195	(11)
Imported cases	—	(—)	2	(—)	178	(75)	25	(—)
Deaths (local)	1	(—)	6	(—)	39	(6)	47	(3)
Deaths (imported)	1	(—)	1	(—)	53	(15)	9	(—)
2. Typhus (Louse-borne).								
Local cases	1	(—)	—	(—)	6	(—)	2	(—)
Imported cases	—	(—)	—	(—)	4	(—)	—	(—)
Deaths (local)	1	(—)	—	(—)	—	(—)	—	(—)
Deaths (imported)	—	(—)	—	(—)	2	(—)	—	(—)
(b) Infectious Diseases:								
1. †Amoebic Dysentery.								
Local cases	429	(—)	27	(—)	828	(—)	34	(—)
Imported cases	110	(—)	30	(—)	85	(—)	5	(—)
Deaths (local)	2	(4)	2	(5)	186	(287)	7	(13)
Deaths (imported)	1	(—)	—	(—)	93	(137)	5	(1)
2. Anthrax.								
Imported cases	—	(—)	—	(—)	5	(—)	—	(—)
3. Cerebro Spinal Meningitis.								
Local cases	11	(10)	4	(3)	25	(16)	13	(11)
Imported cases	2	(3)	—	(—)	10	(52)	1	(2)
Deaths (local)	—	(1)	—	(—)	—	(2)	3	(4)
Deaths (imported)	—	(1)	—	(—)	—	(7)	—	(1)

	E.		C.		N.		A.	
4. Diphtheria.								
Local cases	255	(416)	36	(74)	116	(73)	37	(36)
Imported cases	49	(65)	5	(1)	33	(48)	14	(7)
Deaths (local)	6	(7)	1	(—)	9	(16)	—	(1)
Deaths (imported)	3	(3)	—	(—)	16	(10)	—	(1)
5. Encephalitis.								
Local cases	3	(4)	—	(—)	1	(1)	—	(2)
Imported cases	—	(1)	—	(—)	—	(—)	—	(—)
Deaths (local)	—	(2)	—	(2)	—	(2)	1	(4)
Deaths (imported)	—	(—)	—	(—)	—	(—)	—	(—)
6. Enteric or Typhoid Fever.								
Local cases	17	(37)	5	(3)	62	(108)	28	(46)
Imported cases	16	(11)	1	(2)	34	(27)	9	(29)
Deaths (local)	2	(6)	1	(—)	19	(37)	6	(11)
Deaths (imported)	1	(4)	—	(—)	32	(13)	6	(1)
7. Erysipelas.								
Local cases	17	(9)	1	(1)	—	(2)	—	(—)
Imported cases	1	(1)	—	(—)	1	(—)	—	(—)
Deaths (local)	—	(—)	—	(—)	—	(—)	—	(—)
Deaths (imported)	—	(1)	—	(—)	—	(—)	—	(—)
8. Gon. Ophthalmia.								
Local cases	6	(2)	2	(3)	56	(47)	27	(25)
Imported cases	—	(—)	—	(—)	—	(1)	—	(—)
9. Lead Poisoning.								
Local cases	2	(—)	—	(—)	—	(—)	—	(—)
10. Leprosy.								
Local cases	—	(—)	—	(—)	7	(2)	1	(—)
Imported cases	—	(—)	—	(—)	2	(2)	—	(—)
11. Poliomyelitis.								
Local cases	55	(3)	2	(—)	26	(—)	11	(—)
Imported cases	28	(—)	1	(—)	13	(—)	4	(—)
Deaths (local)	3	(—)	—	(—)	5	(—)	4	(—)
Deaths (imported)	2	(—)	—	(—)	1	(—)	3	(—)
12. Puerperal Sepsis.								
Local cases	3	(—)	—	(—)	6	(4)	12	(8)
Imported cases	—	(—)	—	(—)	—	(—)	—	(—)
Deaths (local)	—	(1)	—	(—)	2	(5)	8	(8)
Deaths (imported)	—	(—)	—	(—)	6	(1)	—	(2)
13. Relapsing Fever.								
Local cases	—	(1)	—	(—)	—	(1)	—	(—)
Imported cases	1	(—)	1	(—)	—	(1)	—	(—)
14. Scarlet Fever.								
Local cases	133	(191)	5	(4)	4	(—)	—	(1)
Imported cases	12	(24)	—	(—)	1	(—)	—	(—)
15. Tracoma.								
Local cases	—	(—)	1	(—)	—	(—)	—	(—)
Imported cases	—	(—)	—	(1)	3	(—)	2	(—)
16. Typhus (Murine).								
Local cases	3	(—)	—	(—)	—	(—)	—	(—)
Imported cases	1	(—)	—	(—)	—	(—)	—	(—)
Typhus (Tick-bite).								
Local cases	4	(—)	—	(—)	3	(—)	—	(—)
Imported cases	30	(—)	2	(—)	2	(—)	—	(—)
(c) Non-Notifiable Diseases:								
1. Bilharzia.								
Local cases	—	(—)	—	(—)	2	(1)	—	(—)
Imported cases	2	(1)	—	(—)	4	(—)	—	(—)
2. Malaria.								
Local cases	—	(—)	—	(—)	—	(3)	2	(—)
Imported cases	81	(154)	16	(2)	53	(34)	1	(2)
Deaths (local)	2	(1)	—	(—)	1	(—)	1	(—)
Deaths (imported)	—	(—)	—	(—)	—	(1)	—	(—)
3. *Other Dysenteric Diseases.								
Local cases	22	(771)	28	(57)	3,076	(5,722)	244	(445)
Imported cases	185	(360)	38	(54)	1,636	(1,793)	61	(85)
Deaths (local)	8	(29)	31	(32)	631	(1,102)	128	(268)
Deaths (imported)	4	(10)	3	(1)	216	(425)	5	(7)

† Notifiable from 1/1/1945.
* Notifications from Hospitals only.

Poliomyelitis: The following table reflects the age groups and sex of all notifications:—

Age Group	E		C		N		A		Total		Grand
	M	F	M	F	M	F	M	F	M	F	Total
0 — 1	2	1	2	—	4	3	2	1	10	5	15
1 — 2	5	6	—	—	1	4	—	1	6	11	17
3 — 5	14	7	—	—	4	4	4	1	22	12	34
6 — 15	19	11	2	—	2	3	2	1	25	15	40
16 — 25	7	3	—	—	3	2	2	1	12	6	18
26 — 45	2	5	—	—	3	—	1	2	6	7	13
46 — 65	1	1	—	—	—	—	—	—	1	1	2
Over 65	—	—	—	—	1	—	—	—	1	—	1
Total	50	34	4	—	18	16	11	7	83	57	140

DEATH RATES FOR DYSENTERY AND GASTRO ENTERITIS

Rate per 1,000 of the Population.

	European.	Coloured.	Native.	Asiatic.	All Races.	Non-European.
Dysentery.						
1945	.03	1.00	4.08	.23	1.13	1.80
1944	.14	1.03	6.11	.76	1.90	2.95
Gastro Enteritis (Under 2 years).						
1945	.05	2.56	6.44	.91	2.01	3.20
1944	.11	2.51	7.67	1.41	2.54	4.01
Gastro Enteritis (2 years and over).						
1945	.01	.11	.84	.21	.23	.47
1944	.02	.11	1.45	.61	.57	.93
All Dysenteries.						
1945	.09	3.67	11.36	1.35	3.37	5.47
1944	.27	3.65	15.24	2.77	5.00	7.89

DEATH AND INCIDENCE.

Rate per 1,000 of the Population for **Enteric and Diphtheria.**

	European.		Coloured.		Native.		Asiatic.		All Races.		Non-European.	
	D.R.	I.R.	D.R.	I.R.	D.R.	I.R.	D.R.	I.R.	D.R.	I.R.	D.R.	I.R.
Enteric..												
1945	.02	.15	.11	.58	.51	.86	.11	.28	.19	.39	.27	.53
1944	.05	.34	—	.34	.51	1.49	.11	.47	.19	.69	.28	.89
Diphtheria.												
1945	.05	2.33	.11	4.01	.12	1.61	.02	.37	.07	1.55	.07	1.05
1944	.06	3.84	—	8.44	.22	1.01	.02	.37	.09	2.09	.11	1.02

DIPHTHERIA: NOTIFICATIONS IN RACIAL, AGE AND GEOGRAPHICAL GROUPS (CITY AND EX-CITY CASES).

	0—1 years.				1—2 years.				2—5 years.				5—15 years.				15—25 years.				25—45 years.				Over 45 years.				Total.				All
	E.	C.	N.	A.	E.	C.	N.	A.	E.	C.	N.	A.	E.	C.	N.	A.	E.	C.	N.	A.	E.	C.	N.	A.	E.	C.	N.	A.	E.	C.	N.	A.	Races.
Old Borough :																																	
1945	10	3	5	2	14	3	5	2	43	2	8	2	64	7	7	4	22	3	15	3	24	1	4	—	6	—	—	—	183	19	44	13	259
1944	19	2	10	1	30	10	3	2	70	10	3	3	126	23	6	4	21	1	6	2	18	—	9	4	4	—	—	—	288	46	37	16	387
Greenwood Park :																																	
1945	—	—	2	—	1	—	—	—	3	—	—	1	7	—	—	—	1	—	—	—	2	—	—	—	—	—	—	—	14	—	2	1	17
1944	2	—	1	—	4	1	—	—	14	—	—	—	21	1	1	—	2	1	3	—	—	—	—	—	—	—	—	—	43	3	5	—	51
Sydenham :																																	
1945	—	—	2	2	1	—	1	1	2	3	2	2	4	3	2	1	1	—	1	1	1	—	—	—	—	—	—	—	9	6	8	7	30
1944	2	—	—	—	1	1	1	2	3	2	1	1	9	1	2	—	2	1	4	1	2	2	—	—	—	—	—	—	19	7	8	4	38
Mayville :																																	
1945	—	—	7	1	—	—	4	—	—	1	8	2	2	—	10	—	—	1	6	1	—	—	5	—	—	—	2	—	2	2	42	4	50
1944	2	2	6	—	3	—	1	—	1	2	3	—	—	4	3	3	—	—	2	—	—	—	—	—	—	—	—	—	6	8	15	3	32
Umhlatuzana :																																	
1945	1	—	1	—	7	—	1	—	4	—	3	1	11	—	—	1	2	—	—	—	1	—	1	1	1	—	—	—	27	—	6	3	36
1944	2	—	—	—	3	—	—	—	6	1	1	—	14	1	—	—	1	—	—	—	1	—	1	—	—	—	—	—	27	2	2	—	31
South Coast Junction :																																	
1945	1	3	2	1	4	—	5	1	6	1	3	4	7	1	2	2	1	1	1	1	1	1	—	—	—	—	—	—	20	7	13	9	49
1944	3	—	—	3	4	2	3	—	10	2	1	4	11	3	—	5	1	1	1	—	2	—	1	1	2	—	—	—	33	8	6	13	60
Total City Cases :																																	
1945	12	6	19	6	27	3	16	4	58	7	24	12	95	11	21	8	27	5	23	6	29	2	10	1	7	—	2	—	255	34	115	37	441
1944	30	4	17	4	45	14	8	4	104	17	9	8	181	33	12	12	27	4	16	3	23	2	11	5	6	—	—	—	416	74	73	36	599
Ex-City :																																	
North Coast :																																	
1945	1	1	—	—	2	—	1	—	—	—	—	1	1	—	1	—	—	—	2	—	1	—	—	—	—	—	—	—	5	1	4	1	11
1944	—	—	5	—	—	—	3	—	1	—	2	—	2	—	4	—	—	—	1	—	1	—	1	—	—	—	—	—	4	—	16	—	20
South Coast :																																	
1945	1	—	—	—	3	—	2	2	8	—	2	2	3	—	2	1	1	1	2	1	—	—	—	—	—	—	—	—	16	1	8	6	31
1944	—	—	2	1	1	—	1	1	4	—	2	—	8	—	2	2	2	—	—	—	—	—	—	—	—	—	—	—	15	—	7	4	26
Main Line :																																	
1945	—	—	2	—	3	—	—	1	3	2	3	3	6	1	9	2	4	—	1	—	—	—	4	1	2	—	—	—	18	3	19	7	47
1944	—	—	5	1	4	—	2	—	2	1	2	1	3	—	4	—	1	—	11	1	1	—	—	—	—	—	—	—	11	1	24	3	39
Other :																																	
1945	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6	2	2	—	3	—	1	—	1	—	—	—	10	2	3	—	15
1944	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18	—	1	—	17	—	—	—	—	—	—	—	35	—	1	—	36
Total Ex-City :																																	
1945	2	1	2	—	8	—	3	3	11	2	5	6	10	1	12	3	11	3	7	1	4	—	5	1	3	—	—	—	49	7	34	14	104
1944	—	—	2	12	5	—	6	1	7	1	6	1	13	—	10	2	21	—	13	1	19	—	1	—	—	—	—	—	65	1	48	7	121
Grand Total :																																	
1945	14	7	21	6	35	3	19	7	69	9	29	18	105	12	33	11	38	8	30	7	33	2	15	2	10	—	2	—	304	41	149	51	545
1944	30	4	29	6	50	14	14	5	111	18	15	9	194	33	22	14	48	4	29	4	42	2	12	5	6	—	—	—	481	75	121	43	720

GEOGRAPHICAL DISTRIBUTION OF ENTERIC, AMOEBIC DYSENTERY AND OTHER DYSENTERIC DISEASES.

Enteric

	Old Borough	Greenwood Park	Sydenham	Mayville	Umhlatuzana	S. Coast Junction	Total
European	15	—	—	1	—	1	17
Coloured	1	—	2	—	—	2	5
Native	22	2	4	29	1	4	62
Asiatic	13	5	2	1	2	5	28
	51	7	8	31	3	12	112

Amoebic Dysentery (from 1.1.45 to 30.6.45):

European	318	37	14	7	37	16	429
Coloured	11	—	6	6	1	3	27
Native	369	30	41	317	21	50	828
Asiatic	15	1	5	10	1	2	34
	713	68	66	340	60	71	1,318

Other Dysenteric Diseases (Hospitals only):

European	16	—	3	2	—	1	22
Coloured	13	1	5	8	—	1	28
Native	1,258	85	187	1,151	161	234	3,076
Asiatic	81	18	26	53	27	39	244
	1,368	104	221	1,214	188	275	3,370

INFECTIOUS DISEASES ADMITTED TO CITY FEVER HOSPITAL, CONGELLA, DURING THE YEAR.

	European	Coloured	Native	Asiatic	Total
Chickenpox	44 (100)	9 (12)	159 (362)	6 (21)	218 (495)
C.S. Meningitis	22 (11)	— (2)	3 (19)	1 (6)	26 (38)
Diphtheria & Suspects	300 (431)	5 (70)	10 (115)	8 (44)	323 (660)
Erysipelas	1 (—)	— (—)	— (—)	— (—)	1 (—)
Measles	57 (174)	— (16)	66 (636)	1 (11)	124 (837)
Mumps	13 (25)	— (5)	7 (104)	— (1)	20 (135)
Pertussis	20 (92)	4 (10)	20 (111)	1 (—)	45 (213)
Rubella	1 (19)	— (1)	— (5)	— (—)	1 (25)
Scarlet Fever and Suspects	128 (197)	— (5)	— (—)	— (—)	128 (168)
Smallpox	1 (—)	20 (1)	233 (113)	204 (6)	458 (120)
do. Suspects	1 (1)	4 (—)	126 (11)	19 (—)	150 (12)
do. Contacts	— (—)	10 (—)	145 (38)	58 (1)	213 (39)
Trachoma	— (—)	— (—)	— (—)	1 (—)	1 (—)
Typhus	7 (3)	— (—)	— (4)	— (—)	7 (7)
Whooping Cough	10 (—)	— (—)	— (—)	— (—)	10 (—)
Vaccinia	— (—)	— (—)	3 (2)	— (—)	3 (2)
V.D.	— (1)	— (—)	— (—)	— (—)	— (1)
Sundry :					
Lodgers	4 (7)	1 (—)	2 (2)	1 (1)	8 (10)
	609 (1,061)	53 (122)	774 (1,522)	300 (91)	1,736 (2,796)

In October, 1944, all non-European patients were transferred to King Edward VIII Hospital, with the exception of Smallpox cases.

Ambulance Removals : The following table sets out the number of cases conveyed in the Infectious Diseases Ambulances :

	European	Coloured	Native	Asiatic	Total
City Fever Hospital	546 (958)	49 (312)	391 (113)	292 (80)	1,278 (1,463)
Government Hospital	109 (113)	86 (106)	562 (83)	196 (42)	953 (344)
Other Hospitals	28 (30)	23 (285)	351 (186)	127 (24)	529 (525)
	683 (1,101)	158 (703)	1,304 (382)	615 (146)	2,760 (2,332)

Disinfecting Station and Laundry.

Municipal Departments.

City Fever Hospital	—	Disinfections	38,109	(70,381)
do.	—	Articles Laundered	182,555	(237,785)
City Baths	—	do.	66,874	(79,366)
Ocean Beach	—	do.	42,669	(53,664)
Other Departments	—	do.	87,049	(92,585)
			417,256	(533,781)

(a) Routine :		
Private premises — Disinfections of articles	109,822	(77,607)
do. — Disinfection of rooms	3,294	(2,795)
(b) Contract :		
Child Welfare Society — Articles Laundered	4,999	(5,511)
Durban Turf Club — Disinfections	5,880	(5,300)
Entabeni Nursing Home — Disinfections	239,205	(246,287)
Indian Depot Hospital — Articles Laundered	63,697	(45,027)
King Edward VIII Hospital—Articles Laundered	1,290,819	(1,213,455)
do. — Disinfections	48,158	(424,463)
King George V Hospital — Articles Laundered	167,547	(191,833)
S.A.W.A.S. Residential Club—Articles Laundered	435,830	(497,734)
	2,369,251	(2,328,012)

3. TUBERCULOSIS.

1. VITAL STATISTICS.

Notifications.

	European	Coloured	Native	Asiatic	Total
Pulmonary :					
Local	131 (114)	105 (60)	952 (862)	453 (410)	1,641(1,446)
Imported	53 (94)	19 (10)	667 (661)	53 (78)	792 (843)
Non-Pulmonary :					
Local	10 (1)	7 (2)	88 (34)	41 (19)	146 (56)
Imported	1 (—)	3 (1)	175 (82)	7 (7)	186 (90)
Deaths.					
Pulmonary :					
Local	42 (43)	43 (46)	446 (366)	233 (232)	764 (687)
Imported	14 (13)	1 (9)	314 (287)	22 (20)	351 (334)
Non-Pulmonary :					
Local	1 (5)	6 (6)	40 (49)	25 (22)	72 (82)
Imported	3 (1)	1 (1)	39 (34)	5 (2)	48 (38)

DEATHS from PULMONARY TUBERCULOSIS in Age Groups (City Cases only).

Pulmonary T.B.	E.	C.	N.	A	Total
Under 1	— (1)	3 (—)	7 (12)	3 (4)	13 (17)
1 — 2	1 (—)	3 (1)	21 (18)	3 (2)	28 (20)
2 — 5	1 (2)	2 (2)	17 (24)	9 (9)	29 (37)
5 — 15	— (—)	4 (2)	22 (16)	25 (21)	51 (39)
15 — 25	3 (—)	10 (9)	82 (71)	82 (87)	177(167)
25 — 45	13 (20)	15 (18)	203(152)	91 (83)	322(273)
45 — 65	14 (10)	5 (9)	83 (70)	17 (20)	119(109)
Over 65	10 (10)	1 (5)	11 (4)	3 (6)	25 (25)
	42 (43)	43 (46)	446(367)	233(232)	764(687)

DEATH AND NOTIFICATION RATES.
(City Cases only).

	Europeans.		Coloureds.		Native.		Asiatic.		All Races.		Non-European.	
	D.R.	N.R.	D.R.	N.R.	D.R.	N.R.	D.R.	N.R.	D.R.	N.R.	D.R.	N.R.
Pulmonary Tuberculosis :												
1945	.38	1.19	4.78	11.68	6.26	13.25	2.35	4.57	2.64	5.67	4.0	8.39
1944	.39	1.05	5.24	6.84	5.06	11.92	2.40	4.24	2.40	5.05	3.62	7.49
Non-Pulmonary Tuberculosis :												
1945	.01	.09	.66	.77	.55	1.23	.25	.41	.22	.51	.39	.76
1944	.05	—	.69	.23	.67	.47	.24	.19	.29	.20	.43	.31
Tuberculosis—All Forms :												
1945	.39	1.28	5.45	12.45	6.81	14.48	2.60	4.98	2.86	6.18	4.39	9.15
1944	.44	1.06	5.93	7.07	5.74	12.39	2.64	4.45	2.69	5.25	4.05	7.80

D.R.: Death Rate.
N.R.: Notification Rate.

The New Clinic: Structurally, this building was completed in April, 1945, and it has been designated the City Health Clinic in order to avoid stigma from the use of the word "tuberculosis." The building was designed in 1941, and after numerous delays, building operations were commenced about the middle of 1943, and owing to war-time conditions proceeded slowly. The cost of construction is approximately £36.000. Equipment, including X-ray set, has cost to date approximately £5,000 and it is estimated that in order to fully equip the Clinic for all its intended functions, a further £1,500 will be required. The Clinic has been very well built and presents a dignified and modern appearance.

The X-ray set was originally ordered in January 1942 and the Power Unit portion arrived from overseas nearly a year ago, but the remaining parts of the X-ray set have not yet arrived in this country although these are expected to be delivered very soon.

This X-ray set is designed to undertake mass-miniature as well as full-sized radiography, and the City Council's Post-War plans provide for a mobile miniature radiographic service to supplement that undertaken at the Clinic.

It is considered that the Native population of Durban, much of which is migratory in character, is sufficiently large to warrant an additional X-ray set and this will be stationed at the Municipal Native Administration Department. This set has already been ordered and will

relieve the strain which is likely to be imposed upon the X-ray plant at the main Clinic. Accommodation to house this second X-ray set has not yet been erected at the Native Administration Department

As regards other equipment required at the City Health Clinic, most of the furniture has been obtained, and also part of the laboratory and medical equipment. A good deal of the medical and laboratory apparatus has had to be imported and war-time difficulties have held up deliveries. The equipment for the X-ray Dark Room which was ordered long ago is ready for export from Britain but has been delayed by shipping difficulties.

The Clinic has been designed in two equal halves, one for Europeans and the other for non-Europeans, and the X-ray section which is common to both lies between these two halves. Accommodation has also been provided for voluntary asssociations which are directly interested in tuburculosis matters, such as the Natal Anti-Tuberculosis Association, and all Care (After-Care) work will be administered from the Clinic.

In addition to ordinary routine clinic-sessions, mass-surveys by miniature radiography will be undertaken, as well as out-patient treatment consisting mainly of artificial pneumothorax therapy.

It should not be long now before the Clinic is ready to operate. Very large numbers of cases suffering from early disease will be found, so that it is equally important that additional hospital accommodation be provided in the near future.

Present Clinic Facilities: The following routine Out-Patient Clinics are at present held in Durban and cater for both City and Imported cases:—

RACE	HOSPITAL CLINIC
All Races, European and Coloured	Addington Hospital Clinic.
Indians and Natives	King Edward VIII Hospital Clinic, McCord Zulu Hospital.

During the year the following number of attendances by City residents occurred at the above clinics:—

Europeans	1,994
Coloureds	805
Natives	2,745
Asiatics	4,467
Total	10,011

Most of the above clinics will probably be gradually superseded by the new Municipal Clinic when it is ready to function.

Additional Hospital Accommodation. Previous Annual Reports describe the protracted negotiations and the numerous alternative schemes which have been projected during the last four years with the object of securing more tuberculosis beds which are so urgently needed. At the end of this year (June, 1945) negotiations reached a stage at which one of the two following alternative solutions is likely to materialise: either a portion of Springfield Military Hospital will become available, or else new wards will be erected at Umlazi Hospital.

It has been anticipated for some time that after hostilities have ceased the Springfield Military Hospital will provide an additional 1,200 beds for tuberculosis cases of all races.

During the year there were 831 "City" deaths and 398 "Imported" deaths in Durban from tuberculosis. On the basis that at least one-and-a-half beds are required per every death during the year, Durban requires approximately 1,200 tuberculosisbeds for its own residents, and at least 600 beds for imported cases, i.e. 1,800 beds in all, compared with the present hospital accommodation of approximately 325 beds.

The Waiting List for admission to hospital meanwhile grows larger and now numbers 187 officially, but this figure could easily be considerably augmented if every known non-European case were added to the list.

During recent years the solution to this problem has become very seriously complicated by the scarcity of trained nurses. Owing to the length of time needed to train nurses, assuming that new recruits were available, it seems that the only remedy for the shortage of tuberculosis nurses is to enlist the services of nurse-aids, drawn from all races of the population, who would undergo a short course of training, lasting about six months, and would then work under the direction of fully-qualified nurses.

Present Hospital Facilities. The total number of tuberculosis beds in Durban is approximately the same as previously:

Hospital	Total No. of T.B. Beds.	Races Admitted.
King George V Hospital	129	Europeans, Coloureds, Asiatics.
McCord Zulu Hospital	70	Natives, Asiatics.
Indian Immigration	94	Natives, Asiatics.
St. Aidan's Hospital	12	Asiatics.
Umlazi Mission Hospital	20	Natives, Asiatics.
Total	325	

City cases occupy a little over half this number, and the remainder accommodate imported cases.

A few patients are also accommodated temporarily at Addington and King Edward VIII Hospitals in Durban, and occasional cases are sent to Nelspoort, Springkell, Nongoma and other hospitals outside of Durban.

Tuberculosis Staff and Activities. During the year the staff of the Tuberculosis Section of the City Health Department has been increased and now consists of a Tuberculosis Medical Officer, four European Health Visitors, four Indian and four Native Health Assistants, two Clerks and one Typist.

All forms of Tuberculosis are notifiable in terms of the Public Health Act, and on receipt of Notification Forms, patients' names, addresses, etc., are entered in a special Tuberculosis Register, and a Personal File is prepared for each patient. The case is then "followed-up" either by the Health Visitors or Health Assistants according to which race the patient happens to belong, and various particulars are entered on each patients's file, and advice and assistance is given to patients and contacts where necessary.

A special effort is made to get every European and Coloured contact examined at the Clinic, and as many Native and Indian contacts as possible examined. The present clinic facilities do not permit of every non-European contact being examined, and as 1,534 non-European City Cases were notified during the year it has become necessary to select those contacts most likely to have been infected. Where, however, more than one case occurs in a family, the whole family is examined. In this way numerous "tuberculosis families" have been investigated revealing in some cases the fact that every member of the family has been infected.

Of late, special attention has been turned towards ascertaining to what degree European families become infected by their Native domestic servants who happen to contract the disease. Data, so far, indicate the incidence of this type of infection as being extremely low. Whenever the prevalence of the disease appeared to warrant it, diagnostic surveys have been carried out in the case of numerous firms and institutions. Already our investigations indicate the need for very much more extensive research along these lines, particularly in the case of certain industries, such as those in which heavy manual work is undertaken, and others in which the workers are exposed to extreme changes of temperature, and also, of course, those trades in which employees are liable to inhale various types of dust such as metal workers, stone-quarry workers, etc. Once the Clinic is in operation it will be possible, by mass radiography, to carry out theseuseful investigations.

As indicated above, a very full record of particulars regarding every local case notified is kept by this Department. However, as during each successive year, the total number of Notifications increases progressively, and as the number of Notifications exceeds the number of deaths, it will be readily understood that the total number of current case-files kept by the Department steadily increases year by vear, and now runs into thousands. In spite of this, however, there has been no increase in the number of available hospital beds during the last seven-year period; in fact owing to the nurse-shortage it has been necessary to close down certain tuberculosis wards. It will be readily seen that the 300 odd available beds in Durban, one-third of which is used by imported cases, can have little effect from the public health point of view on the spread of tuberculosis in this City.

A further consequence of this lack of facilities for isolating cases, is to complicate the work of the Health Visiting and Clerical Staff. When active cases are living in crowded dwellings, contacts have to be investigated and examined repeatedly, whilst at the same time little can be done to prevent other members of a family from contracting the disease and so adding to the large list of notifications. To those who understand the numerous and trying difficulties encountered by Tuberculosis Health Visitors, it will be readily appreciated how onerous and disheartening their work can be under such conditions.

During the year the following numbers of patient-visits were made by the European and non-European Health Visiting staff:—

European	Patients	....	....	....	3,223
Coloured	„	....	....	....	2,170
Native	„	....	....	....	2,979
Asiatic	„	....	....	....	3,387
			Total	....	11,759

Care Committee (Natal Anti-Tuberculosis Association). The personnel of the Care Committee has been increased in numbers, and the Committee meets once or twice each month.

The requests for assistance steadily increase year by year, and nearly 300 families, of all races, received grants in cash or kind during the year. The majority of these families were non-Europeans, Indian predominating.

Friends of the Sick Association. The work of this organisation, which extends far beyond the boundaries of Durban, has been referred to in recent annual reports. The Association's membership of voluntary workers steadily increases, and the various Care Committees have paid out in grants from their own funds nearly £1,500 during the year. This is additional to numerous grants administered by F.O.S.A. on behalf of the Natal Anti-Tuberculosis Association.

The F.O.S.A. Settlement is steadily growing in size and now consists of twenty buildings. 34 Patients and 56 contacts are residents at the Settlement.

The hard, unselfish and successful work undertaken by F.O.S.A. deserves great praise.

Preventoria. Fifteen Durban children who are tuberculosis contacts were admitted to Pietermaritzburg Preventorium during the year.

Although the new non-European Preventorium at Queenstown was opened officially in October, 1944, cases were actually admitted as from February, 1944. Five Durban children have been admitted and four more are on the waiting list.

Health Education. During the year this Department's Health Education Section has made considerable progress in educating the public as regards the symptoms of tuberculosis and the dangers of neglect. Talks and film-shows have been given to all races, but mainly non-Europeans. 336 Talks on Tuberculosis have been given and 34 film-shows.

Perhaps the most interesting feature in this regard is the number of tuberculosis suspects who, upon hearing the talk from the Mobile Van, realised they had symptoms similar to those outlined, approached the lecturer and subsequently presented themselves for examination at the Tuberculosis Clinic.

VENEREAL DISEASES: STATISTICS

	CONGELLA CITY						IMPORTED						ADDINGTON CITY				IMPORTED			
	C		N		A		C		N		A		E		C		E		C	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
New Cases	53	20	3,903	1,748	502	120	34	15	1,777	849	297	74	238	135	119	68	369	11	184	6
Out-patient Attendances ..	460	232	17,048	9,720	2,174	605	42	35	8,640	4,810	1,094	315	2,510	1,240	1,595	785	1,008	490	618	316
Ward Admissions	42	28	1,428	916	108	104	24	26	781	829	90	96	15	—	6	—	95	—	42	—
Average Number of Beds Occupied	74	71	—	—	—	—	—	—	—	—	—	—	5	—	—	—	—	—	—	—
Clinics M. and F.	543	—	—	—	—	—	—	—	—	—	—	—	339	—	—	—	—	—	—	—

McCORD'S SUMMARY

	N City		N Imported		A City		A Imported		Europeans City		Europeans Imported		Coloureds City		Coloureds Imported		Natives City		Natives Imported		Asiatics City		Asiatics Imported		All Races City		All Races Imported		Grand Total
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
New Cases	265	194	30	35	24	18	3	3	238	135	369	11	172	88	218	21	4,168	1,942	1,801	867	532	155	300	77	5,110	2,320	2,688	976	11,094
Out-patient Attendances	2,405	1,551	265	142	219	130	24	24	2,510	1,240	1,008	490	2,055	1,017	660	351	19,553	11,271	8,859	4,940	2,439	747	1,118	339	26,557	14,275	11,645	6,120	58,597
Ward Admissions ..	247	243	53	131	24	23	5	12	15	—	95	—	42	34	66	26	1,675	1,159	805	852	161	235	95	108	1,893	1,428	1,061	986	5,368
Average Number of Beds Occupied	15	13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	94	84	—	—	178
Clinics M and F	52	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	934

V.D. FOLLOW-UP STATISTICS

The following reflects the activities of the European Health Visitor and Native and Indian Health Assistants in following-up cases:—

	Total Visits		Contacts Located		Defaulters Located		Absconders Located		Clinics Attended		New Cases	
European Health Visitors	2,387	(1,803)	32	(172)	710	(568)	15	(15)	125	(—)	66	(—)
Native Health Assistants	3,245	(3,314)	670	(960)	1,090	(1,391)	7	(4)	29	(—)	488	(—)
Indian Health Assistants	773	(835)	122	(54)	410	(446)	1	(—)	18	(—)	2	(—)
Total :	6,405	(5,952)	824	(1,186)	2,210	(2,405)	23	(19)	172	(—)	556	(—)

The clinical work at Addington Hospital for Europeans and Coloureds has continued under the direction of Dr. Fine during the year. The treatment of European V.D. cases at Addington conforms to a very high standard of efficiency and the courses of treatment given to patients compares favourably with the best British and American clinics. This was demonstrated recently by a survey of several hundred case records. The numbers of merchant seamen treated were less proportionately as the number of large convoys diminished during the year. From the nature of their employment, it is impossible for seamen to get the same regular treatment as civilians but many seamen have voluntarily testified that they get as good, or better, treatment in Durban as in any other port they visit. Something, however, remains to be done for preventive propaganda and measures and this subject is under discussion with the Union Health Department and Seamen's Institute.

Special clinics for Coloured people, of both sexes, were started at Addington during the year and are being attended in increasing numbers.

An interesting development in the work at the non-European clinic at Congella has been adoption of the intensive treatment of Syphilis. After several experimental series with varying doses a routine method is now employed for in-patients which combines with the minimum danger, the maximum cures, with the maximal prevention of infectious relapses. Practically all cases of infectious Syphilis admitted to the Wards are now intensively treated by a ten-day course of injections, after which they are discharged and kept under observation at three-monthly intervals for as long as possible.

During the year the clinic developed its own blood-testing service except for Wassermann Reactions and is now doing an average of 1,000 blood-tests per month. This arrangement has worked very satisfactorily and is of great assistance in reaching a speedy diagnosis as well as serving to estimate the results of treatment.

Revolutionary changes in the treatment of both Gonorrhoea and Syphilis are now near owing to the discovery of Penicillin. All available evidence tends to show that Penicillin will effect a rapid cure of both Gonorrhoea and Syphilis. Its limitations have yet, however, to be determined through the course of time. Since both diseases can be easily prevented by appropriate and simple prophylactic methods and both can be readily cured by modern treatment, it might be thought that the V.D. problem is nearing a solution. But it must be remembered that V.D. is mainly contracted and mainly spread by the ignorant, the careless, the vicious and the reckless, all of whom will fail either to adopt preventive methods or to take suitable treatment when infected.

Control of these diseases must therefore centre on health education and the discovery and compulsory treatment of those affected.

Judging by the very poor results of educational measures obtained in this connection, even amongst highly civilised communities, the prospects for the mainly-illiterate Bantu are not promising.

At present the Public Health Act, whilst requiring infectious cases to place themselves under treatment, does not give specific powers to the Medical Officer of Health to order compulsory hospitalization as it does in the case of other infectious diseases.

Representations have been made to the Advisory Committee on National Health Services in regard to this as well as to other desirable amendments of legislation dealing with V.D. control.

The future progress of V.D. control in Durban would appear to depend upon the following factors:—

1. The extended use of Penicillin;
2. Compulsory hospitalisation of infectious cases;
3. An intensified system of case-finding by means of mobile units carrying out periodical health examinations of all non-European workers in factories, locations, compounds, etc.;
4. Educational measures on an extended scale and prophylactic facilities for visiting seamen.

Juvenile cases reported to the South African Police and the Government Social Welfare Officer during the year were as follows:—

Males	Females
39	81

The following cases were diagnosed by the Medical Officer attached to the Native Affairs Department:—

Balanitis.	Syphilis.	Gonorrhoea.	Warts.	Bubo.
494	59	29	51	25

5. PEST CONTROL. During the year, control measures against all pests expanded considerably, despite heavy calls made upon the entire field staff to assist with mass vaccination during the Smallpox epidemic, this resulted in a temporary interference with field control but nevertheless no pest was permitted to get out of hand.

Plague Control. The most urgent part of the programme was, as formerly, preventive plague control. The year commenced with a fairly extensive infestation of all sewers and storm-water drains, a problem which derived from "blackout" conditions. The programme of systematic poisoning was continued as formerly, special attention being given to areas where "colonisation" was evident.

Baits. During the year some 173,625 poison baits were laid, and the number of rodent carcases collected from trapping and baits was 9,363. Using the number of complaints received from the public as an index, it will be seen that the efficacy of systematic poisoning is reflected in the diminution of complaints. When supplies of poisons are normal, it is intended to increase poison baiting programme. The interim between poisoning "blitzes" will be governed by the progress of the complaint curve.

Traps. The ratio of traps set and rats caught remains substantially the same (i.e. 10 traps to 1 rat) over periods of twelve months, the figures used being derived from both Corporation and Government statistics. Routine trapping of all industrial and commercial premises for "Plague Index" resulted in 999 specimens being examined for B. Pestis, of which 648 specimens were checked by the Government Laboratory. 822 Sets of premises were regularly inspected for "plague index." In order to supplement this work, six specially-trained Indian Field Assistants were added to the establishment.

Rat-proofing. Especially in Maydon Wharf area steady progress was maintained in rat-proofing both new and existing buildings. Close attention has been devoted to the study of asbestos products for vermin proofing. In the laboratory, a test cage was made wherein asbestos "vermin-proof" sheets were used to separate rats from food and water for brief periods not exceeding three days. In these trials the asbestos "vermin-proof" sheets proved their efficiency.

In conformity with the Maydon Wharf Agreement between the Union Health Department and the City Council, the Department's district inspectors have paid consistent attention to premises abutting the Wharf. After inspections, letters are drafted to the owners giving detailed information of the Department's requirements reflecting:—

1. elimination of rodent harbourages;
2. rodent proofing of premises;
3. proper stacking of merchandise;
4. demolition of buildings where rodent-proofing is impossible;
5. time limit for effecting items 1, 2, 3 or 4.

In the case of extensive programmes involving considerable expenditure, a Medical Officer has accompanied the inspectional staff. On all occasions a careful explanation has been given respecting the absolutte necessity for providing a rodent-free belt between the City area and Maydon Wharf, as the construction of the latter encourages rodent-egress from ships.

Many firms have co-operated willingly and much has been achieved. In one instance legal proceedings were instituted against a defaulting firm and an admission of guilt was signed.

The shortage of building materials and artisans contributes to the difficulty in maintaining rodent control at the desirable level in this important area. Ships are regularly fumigated at the instance of the Port Health Department before tying up at the Wharf.

Rodents in Outer Areas. In "veld" rodent-sanitation, the City is fortunate in having a natural rodent-free peripheral belt. Occasional colonies of Multimamate mice, potential plague-carriers, have been detected and speedily exterminated by gassing and laying poisoned wheat. No gerbilles were found despite repeated surveys of the four valleys, Umgeni, Umbilo, Umhlatuzana and Umlaas.

Shack Areas. The rodent problem in shack areas is increasing in importance. Many residents encourage rats to "colonize" by the indiscriminate disposal of food-waste. Control by means of the Rodent Regulations and Zonal Regulations (Slum Act), is difficult of application.

The mobile plague unit, however, was employed to instruct the dwellers in rodent destruction and prevention.

"Green Bait." In order to offset the war-time shortage of phosphorous poison, the Departmental laboratory evolved a useful barium bait in the form of a bread into which barium carbonate, colouring matter for safety, and other attractants are incorporated. The bait is turned out as a loaf of bread coloured pale green which "keeps" indefinitely. When required for use, small pieces are cut off and soaked in water before distribution. Results to date are gratifying.

A large panel van, fully equipped for trapping, gassing and poisoning duties, has been maintained as a mobile plague unit for the constant patrol of dangerous areas and is always available at short notice to carry out urgent measures.

The following is an analysis of rodent specimens caught:—

Black rats	4,691
Brown rats (Rattus Norvegicus)	4,223
Mice	358
Multimammate Mice	86
Striped mice	5
Gerbilles (all species)	—
Total	9,363

These figures do not include satistics from the Government and Military rodent control areas.

Mosquitoes. Control of mosquito nuisance specially relates to the prevention of Malaria and Yellow Fever. No primary cases of malaria were notified this year and in one area (Bayhead) and on one occasion only have A. Gambiae been found.

"Species" sanitation has been the first objective of the programme and consists in the weekly oiling of foci and the drainage and reclamation of water-collections and potenial breeding spots. As an additional check on A. Gambiae, a series of "key-huts" were selected throughout the entire peripheral area and in certain parts of the Old Borough. These were sprayed weekly to estimate the general incidence of mosquito-breeding. No adult A. Gambiae were found among the collected specimens. Some Aedes Egypti (Yellow Fever and Dengue Vectors) were identified.

2,608 Lavae specimens were examined in the laboratory. The regional distribution of various species is given in the following table (vide table No. 2).

During the Season, i.e. November to May, 23 "key-huts," each sprayed weekly, yielded a total of 1,508 mosquitoes. Of this catch, only five were Aedes and fourteen Anopholes, none being of the A. Gambiae species. The rest were all harmless culicines.

Oil-spraying of foci required some 9,270 gallons of anti-malaria oil. "Permanent" control measures, such as draining and ditching, resulted in the cleaning-out of some 436,430 yards of ditches and drains.

It is gratifying to report that very few water-tanks now remain in use in the outer areas though, in many of the poorer areas, water-holes are still in use. These, however, give little encouragement to mosquito-breeding. Many large areas which were formerly persistent sources of mosquito nuisance havealmost completely disappeared through combined drainage and reclamation operations. Examples are the Eastern Vlei, Umgeni River bank near the Model Yacht Pond, Bayhead, and Umbilo River bank near the J. M. Harris Park.

Despite weather conditions favourable to mosquito-breeding, the public complaints regarded as a "pest barometer" were fewer than during the previous year, and each successive year has reflected a small but steady decrease in the number of complaints.

Roaches. The year's programme was again restricted through shortages of staff and materials. Nevertheless, sewers and stormwater drains in the controlled areas as well as catchpits and gutter-bridges, received regular treatment. The firm hold established by roaches under gutter-bridges during the "black-out" period when food wastes were plentiful, is steadily being broken. While no marked reduction in roach prevalence can be claimed, it can be said that the programme has been as successful as possible in the circumstances.

It is possible that the new war-time insecticides such as D.D.T. and more especially "666" (Gammexane) will deal effectually with foci such as the interiors of gutter-bridges, foundations, cavity-walls or ornamental panelling. Supplies of these materials are awaited.

Cimex. Indian economic and sub-economic housing schemes are still being regularly inspected for cimex (bed bug) prevalence. Before occupation, each house, together with furniture and belongings brought in by the tenant, is fumigated by cyanide gas, thereafter, a strict watch is maintained on any subsequent additions to the furnishings.

Cimex control in Municipal Native Compounds still leaves much to be desired, but tests so far carried out on D.D.T. and Benzine Hexachloride indicate that complete and efficient control is possible by use of these insecticides. The organisation of a full-scale programme for these premises is in hand.

During the year the Department carrieid out 152 fumigations whilst the number of cyanide fumigations undertaken by private enterprise was 3,694.

General. The Works Section dealt successfully with many cases of prolific fly-breeding in various foci. The most interesting and difficult was the occurrence of heavy infestation in a large quantity of linseed and ground-nuts at the site of a burned-out factory. The heat of the fire combinedwith waste-water to form an ideal fly-breeding focus, which, however, was quickly controlled. In connection with Typhus control, employers of Native labour agreed to instal deverminising equipment comprising an efficient steam-disinfestor made out of a 45-gallon grease-drum with tight-fitting lid. The apparatus provides hot water as well as steam disinfestation and disinfection facilities. Anti-louse soaps and oils were freely used, resulting in satisfactory control of this dangerous infection.

REGIONAL DISTRIBUTION OF MOSQUITO LAVAE FOR YEAR ENDING 30th JUNE, 1945

	Durban North	Springfield	Central & Umbilo	Greenwood W	Greenwood E	Sydenham	Mayville	mhlatuzana	S. Coast Junction	Total
Coustani	1	41	7	23	15	11	71	197	268	634
Demeilloni	—	18	—	91	72	16	135	236	81	649
Maculipalpis	1	14	—	44	75	36	107	56	16	349
Pretoriensis	—	24	2	189	105	34	117	209	26	706
Cinereus	—	7	—	28	20	1	46	77	7	186
Gambiae	—	—	—	—	—	—	—	6	6	12
Marshalli	—	—	1	—	—	—	—	3	—	4
Squarmosis Var	—	—	—	—	—	—	7	1	1	9
Squamosis	—	—	1	9	—	—	2	10	36	58
Lessoni	—	—	—	—	—	—	—	—	—	1
Grand Total	2	105	11	384	287	98	485	795	441	2,608

The following is a summary of the Pest Control Section's activities during the year:—

	Total
Rodents:	
Premises trapped for Plague Index	823
Baits laid	219,550
Traps set	22,335
Cyanogas lbs. used	183
Rodents destroyed	9,213
Rodents sent to Government Laboratory	351
Rodents sent to Pest Control Laboratory	648
Mosquitoes:	
Larvacide used, Galls.	9,270
Ditches cleared (yards)	436,430
Land cleared (acres)	79
Disinfectant (gallons used)	104
Lavae examined in Departmental Laboratory	2,664

Cimex:	
Premises fumigated by City Health Department	152
Premises fumigated by Private Enterprise	3,694
Roaches:	
Sewer, manholes sprayed	15,672
Stormwater, manholes sprayed	42,783
Gutter-bridges sprayed	18,317
Corporation properties sprayed	38
Government properties sprayed	311
Spray used gallons (Stewart's Mixture)	4,227
Spray used gallons (Pyragra)	41
Powder lbs. (Try-it)	29
Other mixtures (gallons)	53
Vehicles Mileage:	
Anti-Malarial sanitation	9,798
Anti-Plague	3,531
General	18,978
General Assistants:	
Number of visits	15,848
Complaints investigated —	
Rodents	919
Mosquitoes	243
Roaches	51
Flies	39
Fleas and Ticks	9
Premises corrected —	
Rodents	146
Mosquitoes	302
Roaches	9
Flies	4
Native Health Assistants:	
Visits to Corporation Properties	2,516
Visits to Non-European properties	4,680
Control advices given	1,112
Control advices complieid with	738

6. EPIDEMIOLOGY: This year was remarkable for two major epidemics, i.e. Smallpox and Poliomyelitis. The former commenced in June 1944, reaching its height by October and then terminating abruptly at the beginning of December. Poliomyelitis started in September and similarly ended in December.

(i) Smallpox. At the beginning of the epidemic unvaccinated Natives were those mainly affected and a large proportion were from rural areas. As time went on the disease got a firm hold on the Indian community for two main reasons:

(i) failure to report, or concealment of cases;
(ii) failure to submit themselves for vaccination.

Drastic measures had to be taken to overcome these difficulties. Persons responsible for concealing Smallpox were prosecuted and the fines imposed were in many cases the maximum penalty, i.e. £25. Twenty-two prosecutions were instituted, all of which were successful.

The following is an outline of the general procedure adopted throughout the epidemic. Certificates of vaccination were issued when vaccination was declared to be compulsory in October, 1944:—

(1) **Investigation of Suspect Cases:** On notification of a suspect case by a medical practitioner or member of the public:—

(a) The patient was immediately visited by a medical officer; once Durban became "Smallpox-conscious" the public regarded anyone with a spot or blister on the body as a "suspect" case. Telephone calls were received notifying such cases as having been seen walking down the main street or living in an unnumbered shack in a certain district. Although upon examination most of these cases were found to be suffering from innocent illnesses, quite a few did have Smallpox, Chickenpox or the secondary rash of Syphilis.

(b) If a diagnosis of Smallpox or suspect Smallpox was confirmed—
(i) the case was removed by ambulance to the Smallpox isolation ward;
(ii) disinfection of the premises concerned was carried out by the ambulance staff;
(iii) the employer was informed;
(iv) Union Health Department was notified immediately as required by law.

(2) Contacts:
(i) Susceptible contacts were quarantined at their respective houses for fourteen days. By "susceptible" is meant a person who has not been successfully vaccinated within the last five years or has not been three times unsuccessfully vaccinated within a similar period, or has not had Smallpox;
(ii) Employers or susceptible contacts notified re their absence from work;
(iii) Visits to quarantined persons were carried by Health Inspectors to ascertain if any might be developing the disease, and to check up on their strict observation of home quarantine;

(iv) If susceptible contacts arrived with the case and resided outside the Borough they were quarantined at the City Fever Hospital. Their conveyances (taxis, trains, etc.) were disinfected.

(3) **Vaccination:** Large numbers of volunteers were trained as lay vaccinators by the City Health Department. These were derived mainly from:—

(i) The St. John Ambulance Brigade.

(ii) The S.A. Red Cross Society.

(iii) Durban Corporation staffs. Most of the staff of the City Health Department were allocated to the campaign; which meant that much of their daytime routine, office or field duties, were left in abeyance; as centres had to be kept open for the public at night and over week-ends, a considerable amount of overtime cost was incurred. Other branches of the Municipality, notably the Fire Department, were also actively engaged on vaccination;

(iv) Selected members of the general public.

It is timely to express deep appreciation of the excellent work carried out by the above bodies. Without their help it would not have been possible to abort the epidemic by the end of November.

Vaccination units were formed from the above. A unit comprised:

(a) 1 Vaccinator;

(b) 1 Assistant;

(c) 1 or 2 Clerks (for issuing of certificates, etc.);

(d) the necessary equipment; and

(e) requisite transport.

Units were then detailed as follows:

(i) **Flying:** for immediate

(a) vaccination of case contacts;

(b) cordon vaccination (i.e. all occupants of houses within 100 yards of case's domicile).

(ii) **Mobile Unit:** to visit

(a) business concerns where large numbers of employees worked. These served two purposes in that it resulted in very little disturbance of work in the factory, and secondly, there was less flooding of the vaccination centres;

(b) schools (all races);

(c) Native Women's Hostel and Somtseu Road Native Location at the beginning and end of each month so as to catch immigrants from the country.

(iii) Static Centres were established:

(a) **Regionally throughout the Durban City.** The number of units and their time-schedules were arranged on the basis of the population of each area. One unit was permanently attached to King Edward VIII Hospital;

(b) Hours of vaccination were staggered for the convenience of the public: there were night as well as day sessions;

(c) Proper supervision was made for the four races by their having different hours or by utilising separate accommodation;

(d) The Native Administration Department at their various offices vaccinated every Native appearing for registration for employment in the City;

(e) All vaccinees were instructed to re-appear for inspection, and re-vaccination, if necessary.

(4) **Propaganda and Advertisement:**

(a) The daily newspapers, South African Broadcasting Company and a loudspeaker van were all employed to inform the public as to the symptoms and serious nature of the disease; also to advertise the times and venues of vaccination stations;

(b) Posters illustrating the rash were placed at suitable points;

(c) Pamphlets were distributed;

(d) Ticket-examiners and other members of the S.A.R. & Harbours were requested to be on the look-out for persons with suspicious rashes on trains and platforms.

From the institution of mass vaccination June, 1944 until the collapse of the epidemic in December 1944, 425,000 vaccinations were carrieid out by the abovementioned means and at various hospitals. In addition, between 25,000 and 50,000 vaccinations were performed by private practitioners.

(5) **Hospitalisation:**

(a) **Accommodation:** The Formidable Epidemic Diseases Ward at the City Fever Hospital soon proved unable to cope with all the patients arriving from City and surrounding areas on the North and South Coasts. On the 19th October 1944, by agreement with the Union Health Department, all cases were transferred to Fynnland Quarantine Station. It is fitting to mention here the valuable work performed by the Ambulance and Disinfecting Section, who, throughout the epidemic, appeared to live in their ambulances and vans. After the transfer to Fynnland, additional duties were entailed as the nursing staff had to be conveyed to and from the Bluff at different times of the day and night.

(b) **Medical and Nursing Staff:** On 16th November 1944, owing to the vast increase in medical work, Dr. Williams was engaged to attend the Smallpox cases at Fynnland Quarantine Station. He also assisted in the investigation of suspect cases. In January when the epidemic had subsided, Dr. Williams resigned.

The nursing staff in November was similarly increased to a total of—

(a) 5 European Sisters;

(b) 1 European Orderly;

(c) 6 Bantu Nurses;

(d) 13 Indian Ordelries.

The number of cases at that time amounted to over 140; subsequently, as the morbidity rate dropped the staff was reduced.

(c) **Treatment of Cases:** There did not appear to be any satisfactory treatment on record so various methods were tried out. They can be sub-divided into—

A. Local.
B. Systemic.

A. (i) **Peanut Oil** (containing Naphthalene, Paraffin and Scent): This was liberally applied to the whole skin surface, thrice daily, from the onset of the rash until the final scarring of all lesions. This treatment had been recommended by Dr. A. H. Skinner who, prior to his engagement in the City Health Department had employed this method in China. From the subjective point of view the patients maintained that there was an easing of the irritation, and when applied the skin certainly seemed healthier than the untreated skin which had a dry, cracked and necrotic appearance. It was our impression too that scaling and healing of the lesions were quicker and shallower, but obviously this is impossible of proof. Nevertheless, it seems logical that the oil diminishes irritation and where there is less irritation healing must be facilitated. No claim could be made that the oil had any effect on the case mortality.

(ii) **Potassium Permanganate:** This was attempted on a small number of cases but the procedure necessitated too frequent applications owing to drying-out of the solution. The few cases treated in such a manner did give impressive results. Besides, it was felt that as Smallpox seriously affects the Central Nervous System, local treatment should be concerned with the healing skin lesions, best promoted most by a soothing application. The prevention of secondary invaders will be dealt with under systemic treatment.

B. **Systemic:** The figures quoted here refer to persons who had never been successfully vaccinated.

(i) **Sulphathiazole:** This was administered orally in the usual doses (two tablets, three or four times daily for adults and proportionately less for children) from about the second or third day of the rash. This was done in order that the maximum concentration would be in the blood at the time of pustulation when one presumes the skin surface is most susceptible to secondary infection.

In the cases so treated it was noted that there was no effect on the mortality rate when death took place, i.e. about the seventh to eighth day of the rash, when pustulation had just commenced, but on the other hand it was most uncommon to see persons subsequently being assisted along the fatal path by a generalised skin infection. Of thirty-three fatal cases so treated, twenty-three died before the tenth day of the rash, while ten were after the tenth day. Only two or three of the ten showed a marked skin infection.

(ii) **Penicillin:** Four cases were treated with penicillin. Two of these commenced treatment on the 1st day of the rash and received 480,000 units over four days. One died five to six days later, the other nine days later.

A third began treatment on the third day of the rash and died seven days later. A fourth began treatment on about the seventh day of the rash but died three to four days later. Although a very limited series, it was felt that this drug had no effect on the variola virus, and that in view of its being in short supply, Sulphathiazole would be adequate for the elimination of secondary invaders.

(iii) **Atebrin and Calcium:** Two sets of cases weretreated with atebrin and calcium; only those treated up to the third day of the rash are included as it was felt that a search must be made for a drug to neutralise the virus which, as has been demonstrated in the epidemic, usually overpowers its victim on the seventh to ninth day of the rash. Unfortunately, eight of the cases received only $\frac{1}{3}$ of the customary atebrin dose, due to some miscalculation; i.e. adults were given (1) atebrin $\frac{1}{2}$ grain tds. for five days and (2) two calcium tabs tds. for a similar period. Six of the eight cases survived. Another eight cases were given:

(1) Atebrin $1\frac{1}{2}$ grs. tds. 5 days.
(2) Two Calcium tabs. tds. 5 days.
(Children received proportionately smaller doses).
Of these three survived and five died.

After thelatter experience, although over a small number, it was felt that the atebrin might be doing more harm than good; obviously it had no specific effect on the virus, so this line of therapy was dropped.

(iv) **Serum Inoculation:** Serum from recently vaccinated persons was administered intrathecally to a few of the most serious cases. At first 5 c.c.'s were given intrathecally and then the amount was increased to 10 c.c.'s and finally 20 c.c.'s Similar amounts of C.S.F. were removed prior to inoculation. Next, convalescent serum was employed in the same manner. There were only about six cases treated in such a way, one of whom survived.

There was little opportunity of fuhe method might be worth following up in sive demands of epidemic control, but trthering this line of therapy owing to the excesfuture as the only one of any value in combating the variola virus.

Figures showing age and sex incidence and mortality: A series of 301 Smallpox cases were originally taken, but four were left out as other associated conditions were present, e.g. Syphilis, Tuberculuosis, etc., which would have influenced the mortality.

Sex distribution over 297 cases admitted to City Fever Hospital, Durban.

	Females	Males	Total
Incidence	156	141	297
Mortality	49	33	82
% Incidence	54	46	
Case Mortality	31	23	

Age distribution for the 297 cases:

	0—1	1—5	5—15	15—25	25—45	45+
Incidence (all cases)	31	43	50	79	75	19
Deaths (all cases)	18	16	6	19	20	3
Incidence in unvaccinated	27	39	43	43	33	4
Deaths in unvaccinated	18	16	6	16	16	2

From the above, one has the impression that the incidence shows neither age nor sex preponderance; one the other hand, although mortality does not appear to show any sex predilection, it does for age groups at the two extremes of life; those lying between the ages of five and twenty-five seem to have the greater chance of survival.

Vaccination.

A. Complications:

(i) **Local reaction:** This was most variable, but on the whole very few severe reactions were seen; one could not but feel that the calf lymph supplied was consistently of the correct potency. Occasional cases of cellulitis were reported—all those seen at the City Health Department cleared up under appropriate treatement.

(ii) **General reaction:** There were a fair number of cases of generalised vaccina; the rash was invariably mild and no further ill-effects were reported. No causes of post-vaccinal encephalitis were notified.

In view of the fact that about 500,000 vaccinations were performed in Durban during the epidemic, it was most fortunate to have such minor reactions, for often one was told by conscientious objectors or read in sundry overseas literature about the many fatalities following vaccinations.

B. Relation to Morbidity: A series of 301 case histories were taken between July 1944 and December, 1944.

(1) Never successfully vaccinated nor vaccinated during the fourteen days before onset of symptoms 206

(2) Successfully vaccinated more than five years previously 91

(3) Successfully vaccinated within five years of contracting Smallpox 4
Of these four cases:—

(i) successful vaccination took place 4 years ago.

(ii) successful vaccination took place 2 years ago.

(iii) successful vaccination took place 1 year ago.

(iv) successful vaccination took place 6 weeks ago.
With (a) the history of exposure, (b) the typical symptoms and (c) a most meticulous examination of the individual lesions, there was no doubt about the diagnosis. All four cases were modified, some only having a few lesions, and none died. It was concluded that the antigens of vaccinia had not raised the variola antibodies to a high enough titre so as to abort the disease completely.

There were two or thre persons who were close family contacts of Smallpox cases and who developed the prodromal symptoms, i.e. headache, pains in the back, high temperature. After examination they were removed to hospital but on the day or day after the rash was supposed to appear all symptoms disappeared and no skin lesions developed. Here one supposed that previous successful vaccination (over five years ago) had produced a moderate antibody titre which during the prodromal stages had risen sufficiently to prevent the rash from appearing (Variola sine eruptione).

C. Relation to Mortality: In view of the known modifying effect exerted by vaccination on Smallpox during the early part of the incubation period, **"unvaccinated"** is here taken to mean never successfully vaccinated or successfully vaccinated during the latter half of the incubation period, and **"vaccinated successfully"** is taken as having been successful any time before the onset of the disease and/or being vaccinated more than 7 days before the onset of symptoms and having subsequently "taken."

A series of 83 fatal cases (amongst the 301 mentioned before) were studied, there being no other obvious illness which might have influenced the mortality rate.

Total number of cases	298
Deaths in unvaccinated	74
Deaths in successfully vaccinated	9
(One of these had a "keloid" which he stated had been a successful vaccination)	
Survevors in unvaccinated	116
Survivors in vaccinated	99
Case mortality in unvaccinated	39%
Case mortality in successfully vaccinated	8.3%

The following facts are worthy of note in connection with the efficacy of prior vaccination in modifying the clinical course:—

(i) Absence of major complications;

(ii) There were only four Smallpox cases where a successful vaccination had been done within the last five years; and

(iii) Low case mortality in successfully vaccinated as against unsuccessfully vaccinated, i.e. 8.3% as again 39%.

These results serve to vindicate vaccination as the most important prophylactic measure against Smallpox.

VACCINATIONS (Courtesy, Deputy Chief Health Officer, Union Health Department).

The following vaccinations of local infants and 12 year old children were performed urring the year:—

Infants.		
Births entered in Vaccination Register	3,173	(3,327)
Sucessfully vaccinated	1,472	(1,074)
Insusceptible to vaccination	31	(9)
Postponed owing to illness	16	(54)
Previously had Smallpox	1	(—)
12 year olds and others.		
Sucessfully vaccinated	198	
Insusceptible to vaccination	3	
Postponed owing to illness	1	
Infants.		
Exemption Certificates granted	16	(64)
Exemption Certificates refused	31	(3)
Indian Immigration Vaccination.		
Births entered in Register	2,539	
Sucessfully vaccinated	847	
Insusceptible to vaccination	3	
Postponed owing to illness	2	
12 years and over.		
Sucessfully vaccinated	89	

Vaccinations carried out by the City Health Department.

	E	C	N	A	Total
City Health Department	79,456	14,618	174,987	135,667	404,728
Native Administration Department	—	—	49,960	—	49,960
	79,456	14,618	224,947	135,667	454,688

(ii) POLIOMYELITIS: Durban has been particularly free of this disease in the past, and the average incidence for many years being four cases per annum.

In September, 1944, concurrent with the Smallpox outbreak, Poliomyelitis suddenly assumed epidemic proportions. Below are the monthly figures for City and Ex-city cases from September, 1944 until June, 1945:—

Month	City	Ex-City	Total
1944			
September	11	—	11
October	28	13	41
November	23	14	37
December	19	3	22
1945			
January	3	7	10
February	2	4	6
March	1	2	3
April	3	2	5
June	3	—	3
	93	45	138

Sex Distribution (local cases):

Females	Males	Total
37	56	92

Age Distribution:

0—2	2—5	5—15	15—25	25—45	45+	Total
22	24	23	12	10	2	93

Epidemiology:

When the disease became prevalent, extensive investigations were made into the possible modes of spread:—

A. Fly Spread.

Of 81 cases where adequate "follow-up" was possible, the racial distribution was as follows:—

E	C	N	A	Total
55	2	13	11	81

The sanitary services were as follows:—

Water-borne Sewerage	Water Closet D.C. Septic Tanks	D.C. Bucket	Pit-privy	Bush	Total
49	11	20	1	0	81

The Geographical distribution was as follows:—

Old Borough.		Added Areas.		
	42	Greenwood Park		7
		Sydenham		11
		Mayville		3
		Umhlatuzana		7
		South Coast Junction		11
Total	42		Total	39
			Grand Total	81

In connection with 68 of these cases, fly prevalence in the immediate vicinity was as follows:—

Nil	Very Slight	Moderate to Severe
8	27	33

From the above it can be seen that most of the cases occurred in the Old Borough, amongst Europeans, and where water-borne sewerage was installed.

The converse should hold good were sanitation or fly-breeding major factors in the epidemiology inasmuch as non-Europeans are in the majority in Durban and the "added areas" are least well provided with sewerage systems and fly-breeding control.

B. Case Contact Spread.

Throughout the epidemic there were only two instances where "case-contact" could be established as the possible mode of spread.

In once instance, two children lived in the same block of buildings, but on different floors. The onset of the second case was five days after the onset of the first. In the other instance, a child living with her aunt contracted the disease four days after the onset of the aunt's illness. The incubation period of the disease liese between 4 and 14 days.

There were two cases in each of several schools but the dates of onset of the subsequent cases occurred more than six weeks after removal of the initial cases. Moreover, the cases were not in the same class nor did they play together.

C. Water.

All 81 cases investigated used Durban Corporation water for drinking. This is obtained thirty miles away and purified ten miles away, so there is no likelihood of water being an epidemilogical factor.

D. Vaccination.

As the Smallpox and Poliomyelitis epidemics ran together and both are virus diseases, opinions were expressed as to the possible relationship between the disease and vaccination.

The dates of vaccination in relation to the onset of the Poliomyelitis symptoms in 58 cases are given below.

Never Vaccinated	6
Vaccinated 2—14 weeks before	8
Vaccinated 2— 4 weeks before	4
Vaccinated 4— 8 weeks before	17
Vaccinated 2— 6 months before	15
Vaccinated 6 months—2 years before	2
Vaccinated 2—2½ years before	6
Total	58

It is likely that a random survey of healthy persons carried out in the middle of a Smallpox epidemic would reveal similar figures, so that no connection between vaccination and Poliomyelitis can be established.

E. Food.

The source of milk, milk products, bread, vegetables, etc., were included in the investigations, but here again no common factor couldbe elucidated. Nevertheless, the latest research points strongly to the factor of contaminated food as being very important.

F. Animals and Insects.

(i) Rodents. Of 53 cases studied, the following was the rodent position in the several houses. No information was received of dead rodents having been found in the vicinity.

Many Rats	Few Rats	Mice	No Rats or Mice
1	9	3	40

Unfortunately, it was not possible to carry out any investigations on trapped rodents. It is doubtful whether rodents played even a minor role in the epidemic.

(ii) **Cockroaches.** Of 53 cases, 46 complained of cockroach infestation in their houses.

(iii) **Dogs.** 29 out of the 53 kept dogs.

(iv) **Cats.** 12 out of the 53 kept cats.

Conclusions: From the foregoing it seems apparent that the following can be asserted as having played no, or at most a negligible, part in the Durban epidemic:

(1) Inadequate Sanitation.

(2) Fly prevalence.

(3) Drinking water.

(4) General suppliers of food, milk, etc.

(5) Vaccination.

It is, of course, just possible that one of the above factors initiated the infection, but the maintenance of the epidemic must be kept up by one or other of the following factors:—

(a) Case-contact.

(b) "Carriers."

(c) Animals.

(d) Insects.

(e) Dust particles, i.e. airborne.

"Case-contact" has been demonstrated as having little significance in the general spread, but a single focus of infection may create a large number of "carriers" who are naturally resistant or rendered immune by virtue of a previous attack (abortive or otherwise) or by exposure to subinfective doses of infection.

Animals and insects have been "suspected" elsewhere, i.e. rodents and flies, but in Durban, areas where they are most common (e.g. Mayville, Sydenham, etc.) had least cases. Cockroaches have long been a domestic pest in Durban but on the other hand, many towns involved in the poliomyelitis epidemic are cockroach-free. If animals or insects do not play a vital part suspicion must rest upon human "carriers" who themselves free of symptoms nevertheless pass the infection on to others through the medium of airborne dust-particles or food and most probably the latter. Once having acquired the infection, the issue as to whether one develops the disease depends upon the possession of natural or acquired immunity.

Preventive Measures:

(i) Wards were set aside in the Addington and McCord Zulu Hospitals for the reception of poliomyelitis cases;

(ii) A consulting physician was appointed by the City Council for the purpose of diagnosing doubtful cases;

(iii) The public were warned and instructed against the following:—

(a) Gathering in crowds;

(b) Drinking unboiled water and milk;

(c) Sneezing, coughing, etc., in public;

(d) Fly prevalence;

(e) Unhygienic methods of handling food and disposing of human and other organic wastes and refuse.

In addition:

(iv) Swimming baths were closed;

(v) Tonsillectomy and Adenoidectomy operations were postponed until the epidemic had subsided.

Despite every precaution there were instances where children contracted the disease.

The epidemiology and control of poliomyelitis are subjects of continuing research in many parts of the world, particularly the U.S.A., Canada and Sweden, where the necessary field and laboratory facilities are available.

(iii) TYPHUS: During the year, 17 City cases of suspect Typhus Fever were notified, eight of whom were later diagnosed as suffering from either Murine or Tick-bite Fever. Although two of the remaining nine were discharged without a final diagnosis, the remainder were assumed to be louse-borne Typhus.

When a case of Typhus is notified, routine procedure is to carefully disinfest fomites and premises, irrespective of whether lice were found or not. During the year, the virtue of this procedure was justified, for on no occasion did a secondary case occur.

There were eight notifications whereof the diagnosis was changed to tick or murine typhus on clinical grounds, and at a fairly late stage in the illness. Close contacts were extensively disinfested and quarantined under surveillance. It is felt that the large amount of time wasted on such cases could be sued to great advantage elsewhere; were it possible to distinguish between the three types of typhus at an early stage in the illness, considerably staff time could be saved in this connection.

The complement-fixation test, in all cases, clearly differentiates "louse" from "tick" typhus, and generally also from murine typhus.

This test has not been generally employed in Durban but when laboratory facilities suffice, its use is definitely to be recommended.

General Preventive Measures:

The efficiency of disinfestors installed at the various Durban firms were periodically inspected. Deverminising is regularly carried out on these premises.

(iv) TYPHOID: The morbidity rate was considerably lower than that of the previous year. Below is a comparison:—

		E.	C.	N.	A.	Total
Number of Cases	1943-1944	17	3	108	46	194
	1944-1945	17	5	62	28	112

Ice Cream: In three cases there was a history of having obtained and eaten ice cream from the same source, a Native hawker. Further investigations showed that the grease-proof wrapping did not completely cover the ice cream and the Native seller handling the ice cream reacted positively to the Vi-test. It was therefore concluded that the Native was a "carrier" of typhoid infection and the organisms were conveyed to the ice cream by his handling of the unwrapped portion.

Preventive measures taken:

(1) All employees in the ic cream trade must react negatively to the Vi-test and be immunised against Typhoid Fever. The Department applies free facilities to the trade for these purposes;

(2) Ice cream manufactured outside the borough may not be introduced into or sold within the Borough owing to the diffuculties in carrying out regular inspections of premises and personnel;

(3) All ice cream products must be completely wrapped.

Flies and Sewage:

In 29 cases the fly appeared to be the responsible vector through having access to:

(a) fouled bush in 10 cases (i.e. no latrine accommodation whatsoever);

(b) non-fly-proofed buckets or pit-privies in 19 cases.

Most of (a) and (b) were located in the added areas where water-borne sewerage is still lacking.

Polluted Water:

10 Cases of Typhoid were probably contracted through drinking polluted water derived from shallow wells and streams.

Inspections of the Booth Road and Cato Manor area revealed that many pit-privies were constructed on the river banks and even in the dry upper levels of the river bed itself. At the instance of the Department, water has been supplied at various points in this area. Thus although most of the inhabitants fetch their drinking water from the Corporation taps, they wash their clothes and bathe in the adjacent polluted stream.

In terms of the Zonal Regulations under the Slums Act a vigorous campaign was instituted against property owners with the object of enforcing the provision of satisfactory water-supply and sewage disposal for their tenants. Notices were erected at regular intervals along the river banks warning the public against using the water for domestic purposes.

Permanent measures of improvement relate to evacuation of shack dwellers from "unserviceable" areas as soon as new housing becomes available, and the laying on of water and sanitary services to those areas which are serviceable, as a temporary expedient until housing becomes available on a large scale. This campaign will be speeded up as soon as war restrictions have been removed.

Contact Spread:

It was established that 10 cases had contracted the disease through being in contact with previous cases. Contacts are routinely informed as to how Typhoid is spread and the countermeasures to be taken; they are also persuaded to be immunised.

Two of the ten were nurses who had been attending Typhoid cases. Hospitals were then circularised advocating annual immunisation as it appeared that a two years' interval between inoculations was too long.

(v) AMOEBIC DYSENTERY. This disease was declared notifiable from the 1st January, 1945. In order to assess the "amoebic state" of Durban's inhabitants, it was stipulated that the diaignosis must be confirmed by the discovery of cysts or vegetative forms of Entamoeba Histolytica in the stools. The result should be of inestimable value in organising a campaign against the disease as it will disclose the prevalence of "cyst-passers" who are symptom-free but still capable of spreading the disease.

By the end of June, 1945, the local notifications amounted to:

	E.	C.	N.	A.	Total
Disease Incidence	429	27	828	34	1,318
Population	109,541	9,001	100,000	99,324	317,866

	E.	C.	N.	A.	Total
Incidence per 100,000 of the population for 6 months ending 30th June, 1945	391.6	299.9	828	34.3	—

It is thus evident that a control programme must primarily concern the Native food handler.

Food handlers obviously constitute the greatest danger epidemiologically and it appears rational that they should be dealt with in the following order of priority:

(1) Those employed in dairies, milk depots and in the filling and handling of cakes;
(2) Those employed in restaurants and hotels;
(3) Cooks and waiters in boarding houses;
(4) Domestic servants and nurse girls.

If a mass diagnostic educative and treatment campaign could be effectively run on these lines, there should be a fair chance of keepingthe disease well under control. The organisation of the necessary field an dlaboratory facilities is in land.

(vi) MALARIA. There was only one case notified which could be regarded as possibly indigenous. This occurred in July, 1944, at a military camp in the Beachwood area.

Although mosquito-breeding has been fairly prevalent in this vicinity, neither A. Gambia nor A. Funestus were discovered. As the case had been on military service there was the likelihood of his having contracted the disease elsewhere, but in such a mild form that the condition was mistaken for a "common cold" or influenza.

(vii) UMGENI DAM WATER SCHEME: Commencing in September, 1944, four inspections were made of this scheme for the purpose of investigating conditions relating to:

(i) Hygiene and Sanitation;
(ii) Measures employed in the control of (a) Smallpox, (b) Typhus, (c) Plague, (d) Malaria, (e) Typhoid, and Pests;
(iii) Housing;
(iv) Feeding of Non-Europans;
(v) Water supply;
(vi) Medical Service.

Subsequent recommendations by the Department resulted in the appointment of a full-time Sanitary Overseer in April, 1945, and in a marked general improvement in the standards of living of the workers. Conditions now obtaining at the Dam are described in the following:—

(1) **Hygiene and Sanitation:**

(a) **Latrines.**
Europeans: All privies are provided with lids and rendered fly-proof;
Non-Europeans: Squatting boards, designed by the City Health Department, have been installed at all the camps. They are portable, easily regularly cleansed and effective against fly-breeding;

(b) **Drainage.** Stormwater, bath and kitchen. effluents are adequately dealt with by a system of channels leading into french drains;

(c) **Refuse.** Destroyed by incineration.

(2) **Control of Infectious Diseases and Pests:**

(a) **Smallpox:** In February, a mobile unit from the City Health Department vaccinated 16 Europeans and 376 non-Europeans.

Later the Sanitary Overseer, a certified lay vaccinator, regularly vaccinated new employees in batches of 25.
Only one case of Smallpox was notified as having occurred amongst the employees during the year.

(b) **Typhus.** Occasionally a few lice have been discovered in Native clothing but one must admit their presence is a rarity.

Two disinfestors, loaned to the water scheme some years ago, are now being used at regular intervals in the various camps. This safeguard should eliminate the possibility of epidemic typhus occurring among employees of the scheme.

(c) Plague.

(i) **Field-work.** Bush, rank grass and undergrowth at the Main Camp and other semi-permanent camps have been cleared by cutting and burning; lumber and machine parts lying in the open are stacked in lots. These two measures have resulted in a general disappearance of rodent-warrens and nests.

(ii) **Domestic.** New quarters are constructed with a coating of cement on the floors and walls and there are no ceilings, thereby preventing rodent harbourage.
A few of the original quarters where rat infestation is heavy still remain. Gassing with Cyanogas did not cause any appreciable reduction nor is it practical to gas regularly; as these buildings cannot be proofed against rodents, their demolition has been strongly recommended.

(iii) **Store-sheds.** There is evidence of rodent-nesting in both sheds, due to the presence of suitable harbourage facilities.

Advice has been given respecting proper stacking of goods and equipment, the only effective method in the case of open warehouses.

(d) Malaria.

(i) **Anti-larval Measures.** Static water is sprayed once weekly during the eight warm months of the year.

(ii) **Anti-adult Measures.** Huts are to be sprayed nightly for the same period; "key-huts" are to be inspected regularly and any catches to be sent to the City Health Department for identification.

(iii) City Health Department to be notified of any Malarial cases.

(e) **Typhoid.**

(i) Improved hygiene and sanitation as already described.

(ii) Anti-Typhoid inoculation of employees will be carried out in October, 1945, beginning with cooks and other food-handlers.

(iii) Water supply (vide later).

(f) **Pests (Non-pathogenic).** Advice and assistance have been given by the City Health Department on request, e.g. for the control of white ants, Congo floor Maggots, etc.

(3) **Housing:**

Europeans. Houses were weatherproof, adequately ventilated and of sufficient floor space. The most recently constructed quarters however are more commodious and by virtue of an inner coating of cement more easily kept clean and tidy.

Non-European. The original huts consisting of semicircular sheets of corrugated iron were inadequately ventilated, not weatherproof, overcrowded and lacked height.

These are being replaced by two suitable types of hutment.

If for longer use than 1-2 years, the huts will have:—

(i) Wattle and daub walls coated with cement;

(ii) Thatched roofs;

(iii) Windows and doors (when obtainable): and

(iv) Cement floors.

If semi-permanent the huts will consist of:—

(i) Side-walls (wattle and daub) to a height of 3 feet;

(ii) Semi-circular corrugated iron-sheeting, well bolted together, and suspended on central poles 10′ 6″ high; the sheeting then overlaps the side-walls leaving a small air-space between; and

(iii) Wattle and daub end-walls with ventilation openings. Thus accommodation will meet all housing and hygienic requirements and should be comfortable to live in.

(iv) **Feeding.**

Meat. 2½lbs. of meat is now supplied weekly to each non-European labourer.

Vegetables. Land is being ploughed up for the purpose of growing vegetables; these will be used to supplement the present ration.

(v) **Water Supply.** Drinking water is derived either fromroof drainage or the river. The latter is conveyed to the various camps in 44-gallon drums and must be boiled before use.

It is intended to instal miniature purification plants at the camps.

(vi) **Medical Service.** The Hygiene Overseer is in charge of a small dispensary where he attends to minor wounds and complaints, while the more serious cases are referred to Grey's Hospital, Pietermaritzburg.

(vii) Other matters of general interest relating to:—

(a) arranging a course of instruction for Non-European Health Visitors and Health Assistants. Although suitably qualified lecturers are available, the lack of a suitable lecture room at either of the teaching colleges is a hindrance to further progress. Moreover, encouragement in the form of bursaries or grants is necessary so that lowly-paid Non-Europeans may be enabled to undertake the courses projected;

(b) The question of organising some form of health registration, surveillance and health education for domestic servants and nurse-girls among other food-handlers is receiving attention; and

(c) Draft by-laws relating to Laundries and the keeping of cows and pigs were submitted for approval.

7. IMMUNISATION: The Immunisation staff consisted of:—

4 Trained European Nursing Sisters;
1 European Health Inspector;
1 Indian Health Assistant; and
2 Bantu Health Assistants.

Two doctors, engaged on a part-time basis, assisted in Immunisation and Vi-testing. Their duties included:—

(1) The collecting of blood samples for Vi-testing;

(2) Immunisation against Typhoid, Smallpox, Diphtheria and Whooping Cough;

(3) Making of appointments for the above;

(4) Keeping of statistical records;

(5) "Follow-up" visits to homes where children have not appeared for subsequent inoculation; and

(6) Occasional relief of staff of Infectious Diseases Section.

A. Anti-Diphtheria Inoculation:

In July-August, 1944, a comparison of figures for immunisation carried out at the Clinic with those done at schools made it clear that the latter should be given preference. For example at school:—

(i) There are large numbers of children;

(ii) they are easily regimented by the teachers resulting in effecting more inoculations per hour (up to 437 have been done in an afternoon);

(iii) the child loses only some minutes of time, as against one or two hours lost by mother and child if on two or three occasions they come to the clinic from various suburbs; and

(iv) there is no likelihood of the second orthird inoculation being missed through forgetfulness on the part of the parent which is the most frequent single excuse advanced.

Thus four afternoons a week, and often the late mornings were utilised by the mobile unit visiting schools. This has borne fruit as the following figures wil show despite the fact that for some months, last year, the immunisation unit concentrated upon vaccination:—

Complete Immunisation against Diphtheria:	E.	C.	N.	A.	Total
July '43-June '44	2,994	254	39	5	3,192
July '44-June '45	3,696	877	1,800	646	7,019*

*The total 7,019 includes 132 performed by the Child Health Section. Many hundreds more failed to finish the inoculation course especially amongst non-Europeans, because of minor reactions, e.g. sore arms, some fretfulness, or the parents forgetting, but these are not included in these figures which relate only to complete immunisations.

A recent survy of European Government Schools within the Durban Borough produced the following information:

Children Immunised against Diphtheria	Children who have not had Diphtheria	Children not Immunised	Children 1st Injection only	Doubtful whether Immunised
6,244	18	2,582	33	1,348

These figures are fairly satisfactory in view of the fact that the mobile unit has only been operating for little over two years. Even if all "doubtfuls" are excluded it means that 45% have been dealt with at one time or another—there are a few schools which have not been visited yet but are due for attention after the 1945 Michaelmas holidays.

B. Inoculation against Whooping Cough:

This is confined to children under 5 years of age and is usually given as a combined Diphtheria-Whooping Cough vaccine. On account of the age limit the numbers recorded are much lower. Below are the numbers of those completely immunised against Whooping Cough:—

	E.	C.	N.	A.	Total
July '43-June '44	276	4	—	1	281
July '44-June '45	1,072	63	286	11	1,432*

*Of the total 1,432, 164 were performed by the Child Health Section.

There is a great increase in the numbers of immunisations effected but as Whooping Cough has a high mortality in the first year of life every endeavour will be made to increase the annual inoculations in this group.

C. Vaccination:

Vide Smallpox commentary.

D. Vi-Testing:

In January, 1944, the Vi-testing of employees from all accessible dairies and depots supplying milk to Durban was initiated, and the service has been carried on continuously ever since.

The criteria employed for discharging an employee from the occupation of food-handling were:—

(a) 1 positive Vi-reaction (1/10 1/20) or
(b) 2 Doubtful Vi-reaction („ „)

In the case of either of the above results the employee was requested to return in one month's time for further tests. Two consecutive negatives allowed him to resume his food-handling employment. If the test was again positive or doubtful six months had to elapse before further tests could be performed. Positive and doubtful reactors (Bantu) had their registration certificates endorsed to that effect. The Native Administration Department gave valuable assistance in precluding these controlled carriers from handling food products and in finding employment for them in other types of occupation.

From the beginning of 1945 each case of typhoid was advised to appear for Vi-testing some time after discharge from hospital. Unfortunately the response was poor. On the other hand all typhoid contacts concerned with food-handling (domestic(restaurants, hotels) were obliged to be Vi-negative before resuming occupation.

Below are the figures:—

Vi-tested.	E.	C.	N.	A.	Total
18/1/44—30/6/44	3	2	698	19	722
1/7/44—30/6/45	20	12	1,731	77	1,840
Discharged i.e. Vi-positive or double doubtful					
18/1/44—30/6/44	—	—	38	1	39
1/7/44—30/6/45	1	3	67	1	72
Re-tested and allowed to resume previous occupation.					
18/1/44—30/6/44	—	—	—	1	1
1/7/44—30/6/45	1	—	10	—	11
Vi-tested after having suffered from Typhoid					
18/1/44—30/6/44	—	—	—	—	—
1/7/44—30/6/45	1	—	—	2	3
Foodhandling Contacts (of Typhoid cases) Vi-tested.					
18/1/44—30/6/44	—	—	5	—	5
1/7/44—30/6/45	10	—	7	7	24

During the coming year Vi-testing will be extended to ther food-handling occupations, e.g. staffs in (a) Native eating houses, (b) Municipal beerhalls and breweries and (c) restaurants. It is hoped to include all restaurants and hotels in due course.

E. Anti-Typhoid Inoculation.

To begin with, the following groups were dealt with:— dairy employees, bakery employees and typhoid contacts. During the year the service has been extended to those employees at conservancy stations (in view of their being more than ordinarily exposed to the risks of Typhoid), all restaurants and milk bars, Native eating houses, certain hotels, Native breweries and food factories.

At the outset there was difficulty in persuading certain groups to complete the course owing to the fact that T.A.B. vaccine caused a somewhat painful local reaction. Dr. Grasset, of the S.A. Institute of Medical Research, suggested the use of T.A.B. endotoxoid in single doses (1.2 c.c's. for adults at yearly intervals). This has been successful as no second injection is necessary. There are still some reactions but if half o fthe staff of a restaurant is inoculated in groups it is rare to receive complaints that the daily routine has been upset by absenteeism. The "one-shot" technique enables double the number of people to be immunised in the same space of time.

The numbers of those completely immunised against Enteric Fever during the year were as follows:—

E.	C.	N.	A.	Total
161	19	1,646	628	2,454

Except for employees inoculated against Typhoid when blood specimens are taken for Vi-testing, all immunisation is done at the place of work. This has encouraged employers to co-operate in having their employees immunised.

When the Immunisation staff is increased, it is hoped that every Durban food handler, whether industrial or domestic, will be regularly inoculated so as to maintain a high degree of Typhoid immunity.

Good progress was made during the year with the free service of artificial protection against Diphtheria, Whooping Cough and Enteric by means of immunisation.
Statistics are as follows:—

(a) Complete Immunisation.	E.	C.	N.	A.	Total
Diphtheria	3,696	877	1,800	646	7,019
Whooping Cough	1,072	63	286	11	1,432
Enteric	161	19	1,646	628	2,454
(b) The number of injections given were as follows:—					
Diphtheria.					
Adults	83	5	2	—	90
Children	5,357	1,134	3,645	1,325	11,461
Diphtheria and Whooping Cough					
Children	2,977	330	1,481	96	4,884
Whooping Cough					
Children	398	—	—	—	398
Enteric.					
Adults	141	14	128	120	403
Children	122	36	21	86	265
Food handlers	37	6	1,776	109	1,928
One shot technique	74	6	737	541	1,358
Conservancy Stations	9	3	959	—	971
	9,198	1,534	8,749	2,277	21,758

8. PUBLIC HEALTH EDUCATION.

During the previous year's work the need for acquiring loud-speaker and out-door bioscope equipment had become apparent. No other methods could be effective in the distant fringes of the city where venues are unobtainable and the non-European population chiefly congregated.

Loud Speaker Unit.

In the early part of 1944/45 the Municipal Native Administration Department generously loaned their amplifier and microphone for health education activities among the Bantu. During the Smallpox epidemic, thousands of reluctant Africans were persuaded to undergo vaccination following health talks and the display of photographs of smallpox victims. Later on, vaccination became compulsory.

Because of the remarkable success achieved by the borrowed "Van with the Voice," the Department sought and was granted its own loud speaker unit.

It was found that during lunch time and between the hours of 4-6 p.m. on Saturday afternoons and Sundays were the most suitable times for attracting good crowds. Other groups contacted were:—

Workers waiting at suburban railway stations, families and nomads in the shack areas; domestic servants and nurse girls; park habitues; dwellers in compounds, locations and queues at beer halls.

The "Voice of the Van" has become the Voice of a Friend to the non-Europeans of Durban on all matters of health relating to prevention and early submission to treatments.

Open Air Visual Education:

Authority was granted for the purchase of a 16 m.m. projector during 1943/44, but accessories were needed in the form of microphone and large weatherproof screen before outdoor health education could be developed. These were provided during the year and the first open-air health bioscope with unborrowed equipment took place at Greenwood Park where approximately 2,000 non-Europeans attended.

Open-air work is limited by weather conditions. The films shown include V.D., T.B. and Typhus prevention, Pest Control, Nutrition and Infectious Diseases. Two films have been acquired by the Department.

Owing to war restrictions, the S.A. Red Cross and Union Film Library have been unable to produce the variety and number of films required to provide a varied programme.

It is hoped to produce health films or at least scenarios locally if restrictions are removed. It is a commonplace to hear requests from Natives to see more health films and for a member of the audience voluntarily to pass a vote of deep gratitude. But then the Bantu tradition has ever been one of courtesy.

Grant: Native Revenue Account.

£500 was sought and obtained from this account for the purpose of expanding health educational activities among the Bantu. Part of this gift was allocated to publishing weekly health columns in the African press "Ilanga Lase Natal." The articles which appeared regularly over a period of eleven months were:—

Venereal Diseases (3).
Infectious Diseases (3).
Worms (3).
The Fly.
Scabies.
Care of the feet.
Rats in relation to disease.
I.D. by a Health Visitor.
A Doctor versus an Inyanga.
Typhoid.
Injections: Why they are used and what for.
Maternal and Child Health.
Tuberculosis (3).
Child Health (3).
The Common Cold.
Bilharzia.
Impetigo.
Care of the teeth.
Nutrition (6).
I.D. by an I.D. Inspector.
Housing (3).
Isitshimiyane in relation to health.
Prevention is better than Cure (Child Health—4).
Child Diarrhoea (2).

Grant: Indian Immigration:

Representations were made to the Commissioner for Indian Immigration and Asiatic Affairs for an annual grant of £400 for expansion of health education amongst the Indian community. Although expressing sympathy with the aims of such projects, the Commissioner regretted his inability to make such a grant. Part of this money was to have been allocated to the salary of an Asiatic official and part to Press publicity. To date, no Asiatic official is doing full-time health education, whilst there are two full-time African officials.

Programme Repertoire:

When skeleton staff only was available for the work, subjects of instruction were confined to V.D., T.B. and I.D. control. Already to these have been added Domestic Hygiene, Pest Control and Nutrition, the last-named embracing the selection of balanced meals, recognition of deficiency diseases, economical buying and preparation of food.

It was observed that among the great army of industrial workers who exercised their right to accept cash in lieu of food, the majority were buying so unwisely and often so little that malnutrition and its attendant evils were inevitable.

During a nutritional survey among industrial groups, the circumstances of a group of Africans employed by a certain firm over a period of years were studied. After feeding themselves for several months, the boys found themselves so undernourished as to be unable to perform their work of handling heavy bales.

Instructions of the need for balancing diets have been welcomed by industrial workers as well as by location and educated groups.

Range of Activities:

The routine programme has now advanced to the stage of providing at least four lectures daily to the Bantu and at least one bioscope is shown weekly to the following defined group-activities:

(a) Daily talks to male Bantu servants seeking registration at the Native Administration Department;

(b) Talks to industrial and commercial employees;

(c) Instruction to food-handlers in hotels, bakeries, cakeshops, tea-rooms and restaurants;

(d) Coloured, Asiatic and Bantu day schools and Bantu night schools;

(e) Religious, social, cultural, educational and welfare groups;

(f) Locations, Hostels, Housing Schemes and Slum Areas;

(g) Parent groups; and

(h) Other groups reached by the Unit include Nurse-girl groups in parks and gardens, wayside gatherings, black belt habitues, shack-land, beer hall queues, dock labourers, railway station crowds and on the beaches. Amongst these groups every section of the African community may be found from Nurse-girls with their charges, ricksha boys to Native leaders, domestic, commercial and industrial workers;

(i) Broadcasts in Zulu; and

(j) Talks to Women's Institutes.

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Subject	Old Boroug Talks		Old Boroug Films		Grenwood Park Talks		Grenwood Park Films		Sydenham Talks		Sydenham Films		Mayville Talks		Mayville Films		Umhlatuzana Talks		Umhlatuzana Films		South Coast Junction Talks		South Coast Junction Films		Total Talks		Total Films	
Venereal Disease	439	(116)	30	(17)	6	(—)	2	(1)	6	(—)	—	(—)	6	(8)	1	(—)	6	(—)	—	(—)	27	(8)	2	(3)	490	(132)	35	(21)
Tuberculosis	290	(59)	30	(10)	6	(—)	2	(2)	4	(—)	—	(—)	5	(5)	1	(—)	1	(—)	—	(—)	30	(4)	1	(—)	336	(68)	34	(12)
Infectious Disease	404	(59)	26	(18)	39	(4)	2	(—)	16	(4)	1	(—)	11	(6)	2	(—)	10	(1)	—	(1)	44	(31)	2	(3)	524	(101)	33	(24)
Immunisation	318	(2)	17	(—)	11	(2)	2	(—)	13	(6)	1	(—)	7	(—)	2	(—)	9	(—)	—	(—)	38	(—)	1	(—)	396	(11)	23	(—)
Food Hygiene	297	(34)	2	(—)	7	(—)	—	(—)	12	(—)	—	(—)	5	(2)	4	(—)	6	(3)	—	(—)	18	(2)	—	(—)	354	(41)	6	(—)
Domestic Hygiene	34	(6)	—	(—)	5	(—)	—	(—)	6	(1)	—	(—)	12	(1)	—	(—)	4	(—)	—	(—)	10	(—)	—	(—)	71	(8)	—	(—)
Nutrition	4	(—)	1	(—)	—	(—)	—	(—)	—	(—)	—	(—)	—	(—)	—	(—)	—	(—)	—	(—)	2	(—)	2	(—)	6	(—)	3	(—)
Pest Control	40	(—)	—	(—)	6	(—)	—	(—)	4	(—)	—	(—)	12	(—)	—	(—)	7	(—)	—	(—)	10	(—)	—	(—)	79	(—)	—	(—)
																							Grand Total		2,247	(360)	134	(57)

NOTE: Figures in brackets denote previous year.

(B) ATTENDANCES :

Venue	E.	C.	N.	A.	Total
Old Borough	1,334	639	35,173	3,359	40,505
„ „ 1943/44	3,282	468	16,005	4,819	24,574
Greenwood Park	80	—	4,124	387	4,591
„ „ 1943/44	—	—	1,130	—	1,130
Sydenham	—	—	1,106	89	1,105
„ 1943/44	—	20	379	—	399
Mayville	—	20	2,438	2,295	4,753
„ 1943/44	15	150	1,250	—	1,415
Umhlatuzana	75	30	411	385	901
„ 1943/44	—	—	152	—	152
South Coast Junction	—	—	7,541	1,976	9,517
„ „ „ 1943/44	20	8	3,275	996	4,299
Total :	1,489	689	50,703	8,491	61,372
„ 1943/44	3,317	646	22,226	5,815	32,004

N.B.: South Coast Junction embraces the entire Bluff area, Clairwood and Merebank.

9. INDUSTRIAL HYGIENE:

Factories: Cloakroom and lavatory accommodation at factories visited throughout the year have been clean. Where structural conditions were found to be deficient, their remedy was sought through co-operation with District Health and Government Factories Inspectors.

Shops: The larger premises in the central area have been up to standard. In several instances, additional cleaning, repainting and provision of towels and toilet-buckets have been provided when requested.

Public Conveniences: The outlying convenience-blocks are always in a good state of cleanliness. Naturally, those in the central area are sometimes below standard, being congested at certain periods daily. Complaints andrequests have been referred to the Cleansing Department. Since the Police Department arrested some female vagrants loitering at the Gardiner Street convenience there has been a marked improvement in the amenities.

Magazine Barracks: Since August last year, the male and female lavatory and ablution blocks have been visited practically every week. The condition at each separate block vary so much each week that it is not possible to report that general cleanliness has improved to any great extent. However, it was noted that some of the inmates do make an effort to keep their surroundings clean.

Immunisation—Field Work: During the period August 1944 to January 1945, assistance was given in supporting the immunisation campaign. Personal visits were made. In the neighbourhood of diphtheria and whooping cough foci, homes were visited to the number of 688. Since January, 1945, this work has been taken over by the Immunisation Section staff of trained health visitors.

Health Education in General: Short talks on tuberculosis, venereal disease, food handling and infectious diseases were delivered from the loud speaker unit to commercial and industrial groups (female).

The venues were open air sites, parks, outside beer halls and near-lunchtime collections of Natives in open fields or on the Esplanade. Assistance was also given in organising lunchtime talks by Bantu Health Assistants at factories and other large premises where Natives are employed.

Health Education Amongst Children and Adults: Statistical information as to the work done by this Section under this heading is given below:

HEALTH TALKS

AFRICANS		ASIATICS		COLOURED		FOOD HANDLERS		EUROPEAN POPULATION
Adults	Children	Adults	Children	Adults	Children	Adults	Children	
Church Halls etc. 19 talks. Audience 1,430.	Schools 8. Audience 1,320.	Churches 2 talks. Audience 180.	Schools 38. Audience 6,356.	Churches 2. Audience 34.	School 1. Audience 50.	25 Premises. Audience 255.	Audience 215.	2 Colleges. Audience 260.

All the above figures are approximate.

Immunisation Against Enteric Fever:

In connection with the field of European-staffed Tea Rooms and Restaurants, it is gratifying to record that practically one hundred per cent. consented to be immunised against Enteric Fever, as the result of carefully prepared talks to food-handlers.

Literature:

It is hoped in the ensuing year to increase the number of health pamphlets and posters illustrative of local health control problems. Owing to pressure of work and shortage of staff the year's output has been limited to the following:

V.D. Leaflet: English and Zulu;
V.D. Pictorial Posters (3) Zulu;
T.B. Leaflets: English and Zulu;
Food Handler Hygiene Card: English and Zulu;
" " " Pictorial Poster: English;
" " " Leaflet: English and Zulu;
Nutrition Pictorial Posters (3): English;
" Leaflet: English and Zulu;
Kill that Fly Pictorial Poster: English;
The Mosquito Pictorial Poster;
The Fly Pictorial Poster;
The Flea Pictorial Poster;
Infantile Paralysis Leaflet: Zulu;
Smallpox Pictorial Poster: Zulu;
" Leaflet: English;
Diphtheria Immunisation Pictorial Poster;
Sneeze Pictorial Card (100 of which are now on bus routes throughout the City).

The S.A. Red Cross Society have from time to time invited and adopted suggestions regarding health literature, especially for issue to non-European groups.

Thus far represents what has been done from our side. But what of the vast congregation on whom this battery of instruction has been directed? As far as V.D. and T.B. are concerned amongst non-Europeans, there is a constant stream of evidence in those who appear at the V.D. or T.B. clinics after having heard one or other of the media of instruction.

Part of the undoubted achieved success amongst the Bantu is due to the competence of the African lecturers who are well versed in Zulu customs, traditions and habits of thought. Their task is to erect superstructure of western health knowledge and practice upon the scanty albeit sturdy, basis of primitive Bantu health culture.

The widespread interest created by Durban's developing programme of health education is proved by the receipt of requests for information and assistance from places as far apart as Bulawayo and the Cape.

Because of their obvious needs as a primitive people undergoing the stressful process of industrialisation, the Bantu groups have been given first priority in health education. The other racial groups, however, have not been neglected.

"You cannot stop the spread of disease with a law, a health officer and a placard. You must get the co-operation of the people by education, persuasion and organisation." (Director of Health, Nebraska.)

Magazine Barracks:

Inspections were carried out at the Magazine Barracks lavatory and ablution blocks since October of last year.

For the first 3 to 4 months these blocks showed little or no improvement. One section would be clean and another dirty, but on the next visit the reverse would be the case. The male sections of these blocks were seldom as fouled as the female sections due no doubt to the use of the latter by the small children of both sexes.

However, since the period April-June, 1945, general improvement has been evident, especially in the female sections of all 14 blocks. Improvement in the general condition of the outside dish-washing areas was also noted. Failure to place rubbish in the bins provided before washing the plates under the communal tap causes gully-blockages from time to time.

A change for the better is perceptible as a result of the guiding influence and control exerted by the Indian women "Monitors" (4) recently appointed for the purpose.

Health education, preferably in the Indian dialects, is needed to stimulate health consciousness among the residents.

10. CLEANSING SECTION (By courtesy of the City and Water Engineer):

Cemeteries. The Municipal Cemeteries were properly conducted and maintained. Private cemeteries were regularly inspected and were generally found to be well conducted and maintained in good order.

Interments. There were 7,154 burials in Municipal cemeteries and 1,251 in private cemeteries. The total of 8,405 compares with 8,449 in the previous year.

Cremations. The cremations totalled 489, of which 353 were European and 136 Asiatic. The total for the previous year was 457.

Free Burials. The Department authorised 226 free burials, consisting of 5 European, 8 mixed, 19 Asiatic and 194 Natives. This compares with a total of 210 for the previous year.

Conservancy. The conservancy service in the Mayville area, which has been carried out by a contractor from pre-incorporation times, was taken over by the Department as from 1st February, 1945. The number of pails in use at the end of the Municipal year was 11,124, being an increase of 468 over the same date in the previous year.

Refuse Removal and Disposal. It was noted during the year that the quantities of refuse being removed were increasing, and this isreflected in the total of 219,559 cubic yards compared with 213,252 cubic yards removed during the previous year.

The disposal was carried on, as in previous years, by a small proportion being incinerated at the Point Destructor and the remainder by tipping on low-lying and swampy areas. The tip at Westridge Park was completed in March and tipping was transferred as from the 8th of that month to an area from which many years ago large quantities of clay had been taken for brick making, leaving a large area of dangerous swamp. Residents in the vicinity have already expressed their appreciation of the improvement being effected by filling up this swampy area. The Council authorised the filling of a large hole in Seaton Park. This was started in September, 1945, and had not been completed at the end of the year.

It is hoped that the use of D.D.T. or some other insecticide may shortly be developed to a point which will ensure complete control of fly development at refuse tips and other potential breeding places.

Street Cleaning. This service was carried out efficiently and without interruption.

Dead Animals. The carcases of 384 dead animals were removed and buried.

Public Conveniences. Very little progress is being made in the erection of new public conveniences; the buildings completed during the year being those at Connaught Bridge and Rossburgh. Both are for non-Europeans and were urgently required in their respective districts. The total number of public conveniences in the City including those in the public parks, etc., but excluding those on Government property at railway stations, etc., is now 55 for Europeans and 56 for non-Europeans.

Barracks Management. Routine measures of administration and control were carried out as in the past.

Repairs and maintenance operations were in progress by artisans of the Works, Water and Sewerage Sections, and by members of the City Electrical Engineer's staff throughout the whole year.

The employment of two additional Indian female monitors was sanctioned by the Council and the activities of these employees has had a good effect in checking and minimising the fouling of latrines, etc., although to be fully effective more should be employed.

The library promised by the Council was erected in the barracks, but has not yet been brought into use.

A start has not yet been made on the construction of water closets, etc., attached to the flats.

Meat Supplies. The number of animals slaughtered during the year was as follows:—

	Bovine.		Swine.		Sheep and Goats.	
	72,370	(62,796)	54,481	(62,496)	215,024	(258,483)
Whole carcases condemned	2,238	(1,835)	3,721	(2,898)	1,144	(1,180)
Portion of carcases—						
weight in lbs.	186,446	(84,107)	19,300	(822)	299,465	(238,589)

11. MILK SUPPLIES:

Hygiene and sanitary arrangements at the "producer-distributor" dairies have been generally satisfactory. In some instances, however, conditions as regards dairy equipment have not been all that could be desired owing to the continued difficulty and even impossibility of obtaining suitable plant and materials in replacement. Controls are now easing, however, and with more sea-going transport available, material on order for a considerable time should arrive in the near future.

Some fly development occurred at intervals during the summer months, but with daily removal of manure from dairies or composting in several cases, development has been reduced to a minimum. In order to eliminate the fly menace, dairymen have been warned to keep paddocks and kraal clear of manure constantly as the life cycle of the fly under suitable conditions is very short.

Some flies will always be found where cattle are kept—but with constant care the fly nuisance can be kept down to a minimum.

Cattle are, however, not wholly to blame, as flies can breed freely in any refuse or garbage during the hot, moist months.

Milk Tests. Bacterial tests have shown much improvement, more particularly during the last few months. One factor which may be concerned has been the closing down of 10 dairies during the year. The number of bacterial tests by means of the "plate count" made during the year was 273, giving the following results:

A.	83	30.5%	satisfactory in both Bacteria and Coli Count.
B.	83	30.5%	failed in Coli Test but passed in Bacteria Test.
C.	3	1%	failed in Bacteria Test but passed in Coli Test.
D.	104	38%	failed in both Bacteria and Coli Test.
	273	100%	

Many of the samples in group D which failed to reach the grade standard in both the organisms and "coli" counts were "borderline" cases. In group A, the bacterial standard in some cases has been exceptionally and consistently good.

Thirty-one prosecutions were instituted for very unsatisfactory bacterial counts during the year.

The Disc Test. The sediment disc test was applied to milk supplies coming in from rural areas to the various depots and has proved very useful in guaging the quality of these supplies. At first many samples showed a large amount of extraneous matter consisting of dust, manurial matter, hair, etc., being evidence of failure properly to supervise operations concerned in the handling of the milk at the source of production. The number of tests made were 273 of which 50 per cent. were unsatisfactory.

The practice has been developed of sending a sample of such discs to the suppliers concerned, together with a covering letter calling for greater care in the production and handling of milk. As a result a general improvement in the quality of supplies from these areas has been observed. It is necessary that milk should be received at the depots in as clean a condition as possible.

The clean discs obtained from clean milk are also sent to the suppliers as an encouragement to continue their cleanly methods of milk handling.

The Phosphatese Test. In order to estimate the efficacy of pasteurisation at the various depots, phosphatese tests have been made to the number of 431, of which

393 indicated efficient pasteurisation;
15 were slightly underpasteurised;
23 were grossly underpasteurised.

It is of interest to note that most of those samples that did not pass the test were encountered during the earlier months of the year—due to ineffective plants, and some defect which resulted in the milk not reaching the required temperature and in some instances not being held at the proper temperature for the necessary time. Inspection and supervision succeeded in remedying the mainly mechanical faultsresponsible for the unsatisfactory results. Today the tests are generally satisfactory.

The High-Temperature-Short-Time process of pasteurisation has been officially approved overseas.

Breed Smears:

The "Breed" Smear method or direct microscopic count of milk smears is very satisfactory and rapid method of estimating the bacterial content of a sample of milk and is most useful in the rapid detection of poor quality supplies received at balancing stations. In all 873 milk smears were examined.

Veterinary Medicine.

Bovine Tuberculosis:

The position as regards the clinical incidence of this disease has been satisfactory. In one instance only has a dairy animal, showing evidence of the disease, been found during routine veterinary inspection and examination of herds.

The udder of the animal showed evidence of a definite mastitis infection but also aroused suspecion which warranted a further examination for T.B. A puncture smear prepared from the mammary substance confirmed the diagnosis. The cow had been dry for some months and was destroyed. The term "clinical" with regard to T.B. infection is used to differentiate such cases from those of the "latent" or non-clinical variety.

Probably thirty per cent. of dairy animals are affected with a T.B. infection of the "latent" type—which would only be disclosed by means of a tuberculin test.

The tubercular lesion in the great majority of these cases occur as small tubercles, usually found in a lymph gland or other organ and would usually cause no trouble during the animal's lifetime. In a small percentage of cases, however, depending upon the amount of resistance of the animal to disease—the lesions will progress and extend giving rise to clinical symptoms. At this stage the udder may become affected. The disease having seached these proportions can be detected during periodic inspection resulting in the affected animal being eliminated from the herd.

88 Samples of mixed milk from the variousdairies have been subjected to the biological test for possible T.B. infection—all with negative results.

Mastitis. Control of this disease consists mainly in the elimination of the more advanced cases which are usually of a chronic nature and a common focus of infection.

The casual agents, bacteria, are to be found in the udder of many cows and may not cause any physical disturbance of the udder-tissue or alteration of the condition of the milk.

In order to ascertain the number of such infected animals, a survey was undertaken and milk from any cow suspected of harbouring the organism was examined microscopically.

1,875 Cows in all were examined for evidence of mastiitis shown by varying degrees of thickening or enlargement of the "quarters" of the udder. From this number, 301 samples of milk were obtained for microscopical examination. The samples were taken from cows which showed any unsoundness or irregularity of the udder, however slight, varying from marked fibrosis of the part to a slight thickening of the tissues.

Of these 301 samples, 156 showed evidence of the casual organism in varying degrees and stages of infection.

This amount, 8.6 per cent. of infection can be considered relatively small. In the majority of cases, the infection will not increase and would probably not cause any clinical disturbance during the lifetime of the animal. In others, the infection may become more or less acute at any time, due to varying conditions, commonly following parturitionand depending to a great extent upon the natural resistance of the animal, resulting in general disturbance and marked loss of milk.

The milk from these mild, non-clinical or latent cases, is physically unaltered and it will be realised that it is difficult to recommend an owner to dispose of such animals which have apparently normal udders and milk, more particularly when the question as to whether the casual organism has any public health significance has not yet been definitely decided.

Anthrax. An outbreak of this disease occurred on a farm just outside the City boundaries whence milk was supplied to Durban. Blood smears were sent to this office for examination and were diagnosed as anthrax. The matter was handed over to the Government Veterinary Officer who officially took charge of control measures.

Some 15 head of cows died and the remainder were inoculated with preventive vaccine. All necessary precautions were taken to prevent the spread of disease with satisfactory results.

Six Natives became infected from handling infected meat and skins but all recovered.

The milk was unaffected, but its supply to Durban was stopped by order of the City Medical Officer of Health during the control period.

The following reflects the number of samples taken:—

For chemical analysis	277	Smears examined by breed smear method	722
„ bacterial test	273	Smears examined for Masitis infection	131
„ biological T.B. test	85	Other blood smears	4

12. OTHER FOOD SUPPLIES.

Ice Cream. The position regarding the manufacture of ice cream continues to be satisfactory, only three local firms engaging in the business and all maintaining the standards required under the Act. All milk used in ice cream manufacture is efficiently pasteurised.

In the absence of laboratory facilities, no bacteriological tests were done.

There has been no reported case of infectious disease or other illness directly attributable to ice cream.

Vi-testing for Enteric. In connection with enteric control and food-handler hygiene, all employees engaged in the milk and ice cream trades were vi-tested for the "carrier" state, the results of such tests being as follows:—

Vi-Test.	E.	C.	N.	A.	Total
Positive	3	2	41	1	47
Negative	17	10	1,241	73	1,341
Doubtful	1	1	114	5	121
Total:	21	13	1,396	79	1,509

Immunisation. In addition to being Vi-tested, all employees are immunised against Enteric, new entrants being done as a routine measure. In order to expedite the works, the "one shot technique" recommended by the S.A.I.M.R. is employed, giving adequate immunisation for 12 months thereafter.

Sampling and Chemical Analysis of Food (excluding milk). Samples have been taken regularly during the year. The City Analyst's reports reflect a very satisfactory position. The number of samples could, however, be doubled with advantage.

In connection with certain doubtful supplies, certain unofficial samples were taken with the following results:—

Salt. Excess of sulphate of soda and carbonate of soda: Consignment condemned and destroyed;

Cream Cheese. Deficient in fat to extent of 58%: Consignment destroyed;

Sugar. Contaminated with poisonous dye: Consignment condemned and destroyed;

Mayonaise. Satisfactory;

Pickled Fish. Satisfactory;

Markets:

(a) **City Market.** The quantity of foodstuffs handled steadily increases year by year and much time is taken up in examining consignments. An additional inspector on full-time is urgently wanted. The rodent position is generally satisfactory, routine gassing being carried out by the City Health Department.

(b) **Indian Market.** These premises are steadily becoming more and more congested. Despite routine gassing and spraying for rodent and cockroach infestation, the general condition as regards pests leaves much to be desired.

(c) **Poultry Abattoir.** Owing to the large amount of dressed poultry arriving in an unsound condition, the Department circularised up-country consignees of dressed poultry with an illustration of a suitably ventilated and vermin-proof box for packing and despatch without much success so far.

The poultry abattoir premises are now becoming congested and due for enlargement, thanks to the increasing use made of its facilities for hygienic slaughtering and dressing. Provision for extension and also for cold storage facilities has been made.

Newcastle Disease. This disease broke out in the early part of the year in the North and South Coast areas and in Zululand. In order to assist the Veterinary Department, the following control measures were undertaken:—

(1) All live poultry to be consigned to the City Market, which became the main distributing centre;

(2) All poultry to be inspected daily prior to sale;

(3) All purchasers to allow poultry to be killed at the poultry killing depot immediately.

(4) Only carcase allowed to be remover for sale, the head, feet and viscera to be removed daily to the Municipal destructor; and

(5) Special disinfecting tank installed where all crates were disinfected before return to consignee.

These control measures are still in force.

Squatters Market. Shortage of materials still prevents the carrying out of the improvements here but a start, it is hoped, will be made in the near future.

Fruit and Vegetable Hawking. No progress has been made with the control of this popular method of distribution and the position can only be described as bad. At present no proper control can be exercised over these hawkers, who are mostly of the poorest and most ignorant class of Indian.

Water Supply. Weekly samples were taken for bacteriological and chemical examination from various high and low level points within the City. All samples were found to be satisfactory.

Auction Sale Rooms. Weekly inspections of Auction Sale rooms, for the purpose of examining foodstuffs, have been carried out during the year. Arrangements were made with the S.A.R. and H. for the sale of excess foodstuffs to be sold at the Excess Depot, where they are inspected prior to sale. All condemned items are sent to the Municipal Destructor, discretion being used in regard to cereal food for sale to cattle and pig farms.

As a result of the daily supervision exercised by the Department at the City Market, the following perishable foodstuffs were condemned:—

Bacon, lbs.	45	Fruit, trays	12
Beans, green, pockets	47	Guinea Fowls	54
Beetroot, pockets	10	Hares	13
Biltong, lbs.	6	Mushrooms, basket	1
Boar, wild, carcase	1	Partridges	11
Buck, carcases	5	Peas, green, bags	224
Butter, lbs.	11	Potatoes, bags	190
Cabbages, bags	85	Poultry, dressed	706
Carrots, bags	5	Swedes, pockets	3
Cauliflowers, bags	170	Tomatoes, box	1
Chestnuts, trays	6	Turkeys, dressed	6
Cumumbers, pockets	16	Turnips, pockets	9
Doves	5	Venison, lbs.	6,419
Fish, box	1	Walnuts, lbs.	27
Fowls, live	5		

Food (surrendered) condemned at other premises:—

Beans, dried, lbs.	13	Nuts, Brazil, lbs.	100
Corn, Kaffir, bags	3	Peas, dried, bags	2
Cream Cheese	4	Pickles, bottles	6
Canned Fruit	3	Potatoes, bags	23
„ Fish	686	Preserves, jars	24
„ Dinner	3	Puddings, Xmas	17
„ Vegetables	27	Rasins, lbs.	36
Flour, bags	1	Sardines, tins	148
Fowls, dressed	18	Salt, cooking, bags	89
Jam, tins	121	Samp, lbs.	75
Jam, cases	130	Snoek, dried, lbs.	2,640
Maltokorn, pockets	4	Sugar, pockets	15
Malt, bags	20	Syrup, bottles	12
Mealie Meal, bags	1	Sweet cartons	5
Mealie Rice, bags	2	Vitacrisp, packets	10

Samples of foodstuffs taken for chemical analyses under the authority of the Foods, Drugs and Disinfectants Act. No. 13 of 1929:—

Article	No. of Samples Taken	No. of Samples Genuine	No. of Samples Defective	Action Taken
Apricots, dried	1	1	—	—
Baking Powder	1	1	—	—
Butter	6	5	1	Warned
Curry Powder	4	4	—	—
Condensed Milk	1	1	—	—
Dripping	1	1	—	—
Ice Cream	15	15	—	—
Milk	277	271	6	Prosecuted
Mustard	2	2	—	—
Meat & Vegetables, tinned	1	1	—	—
Mineral Waters	3	3	—	—
Peaches, dried	1	1	—	—
Pickles	2	2	—	—
Pickled Cucumbers	1	1	—	—
Pineapples	1	1	—	—
Raisins	1	1	—	—
Rice Flour	1	1	—	—
Salt, cooking	4	—	4	(46 bags condemned and destroyed)
Sausages	4	3	1	Prosecuted
Sausages, tinned	1	1	—	—

13. CHILD HYGIENE. The accompanying figures reflect the extent of the work carried out by the staff of the Child Health Section of the Department during the year 1944-45.

It will be noticed that a start has been made with the immunisation of infants and pre-school children attending Child Health Clinics. When an infant reaches the age of nine months a letter is sent to the mother advising immunisation. The response has been fairly good.

In November, 1944, the part-time Physical Culturist employed in this Section resigned owing to ill-health. It has not been possible to secure another one capable of teaching pre-school children. This is unfortunate, as the classes were popular and very beneficial, but now that times are becoming more normal, it is to be hoped that this gap may soon be filled.

It is gratifying to note that the European Infantile Mortality Rate is the lowest yet recorded in Durban. The very high rates of the other races, however, quickly dispel any feeling of satisfaction which might have resulted from observing the European figure only and point to the great need for extended health service activities.

While the low infant death rate in one group is cheering, it cannot be taken as an index of Child Health in general. From observations made at the Durban Clinic, it would appear that there is still all too little improvement in Child Health as guaged by the amount of knowledge being put into practice by mothers and by the general condition of babies, toddlers and pre-school children. One reason for this appears to be that many mothers receive expert assistance too late for them to derive the benefit they might otherwise obtain. I have frequently stressed the fact that school-age is the optimum time to learn mothercraft and it is to be hoped that this subject will soon find a place in all school curricula. But here reference is made to the inadequate instruction received by mothers in maternity hospitals and nursing homes which seldom employ staff with mothercraft training. The result is that little attention is paid to the baby in the first and most important week of its life. Frequently it is wakened up about 2 a.m. and given a bath, after which it has a feed of well-sweetened milk to put it off to sleep again. No thought appears to be given to the trouble this will subsequently cause. The result of this handling is that when the mother arrives home the baby continues to wake at 2 a.m. and refuses to be pacified. As there is now no "night staff" to deal with the baby, the mother has to manage as best she can on account of the exhaustion caused through loss of sleep, frequently ends by putting the perfectly healthy, but badly managed baby on to artificial feeding.

In a hospital or nursing home a mother has no chance of getting to know and manage her own baby. The baby is brought to her to be fed and removed from her sight as soon as the feed is given. She never sees the baby being bathed and when she gets it home does not even know whether or not it has already been dosed with aperient medicines. In short, she has been treated as a surgical case but has received no mothercraft instruction.

This problem has been appreciated and taken in hand by those furthering the promotion of health in Peckham (London) where an experiment in health service has been in progress for some years now with excellent results. This experiment, which is probably the most important of all modern experiments in social medicine and one which is receiving much attention in America, deals with confinements in the following way:

Patients are sent to maternity hospitals for their confinements only; they remain there for forty-eight hours and are then brought home to be under the care of a mothercraft nurse employed by the Centre. This method gives the necessary safety at the time of confinement but allows mothers, and especially those of first babies, to be trained in the handling of their own babies from early days.

While it is unlikely that a complete family health service such as that given in Peckham, i.e. one which deals with the health and well-being of the parents as well as the children, will be put into operation in Durban for many years yet, it is suggested that a step might be made towards that goal by inaugurating a system whereby women go to hospital for their confinement for a period of forty-eight hours only, and on returning home are cared for by Municipal midwives with mothercraft certificates.

The improvement in Child Health in general would very soon justify the money spent on the employment of Durban Municipal Mothercraft Nurses in this important public health field.

	NON-EUROPEAN CLINICS					EUROPEAN CLINICS	
	Brook Street and Gale Street Centres and Mobile Clinics (Vans)				Grand Total	Gale Street Mobile Clinics	Total
	C.	N.	A.	Total			
TOTAL NUMBER OF SESSIONS	112	193	544	849	1,660	283	811
Sessions for children	101	193	445	739	1,514	247	775
Number of ante-natal sessions	11	—	99	110	134	24	24
Number of post-natal sessions	—	—	—	—	12	12	12
TOTAL ATTENDANCE AT CLINICS	5,604	14,548	28,976	49,128	91,849	*15,484	42,721
New cases out of above number	517	3,101	5,375	8,993	13,515	2,787	4,522
Number of infants under 1 year attending clinic	299	1,641	1,354	3,294	5,115	606	1,821
Total attendance of infants	2,128	6,438	8,369	16,935	34,616	6,817	17,681
Number of toddlers and pre-school children attending clinic	205	411	1,038	1,554	3,167	421	1,613
Total attendance of toddlers and pre-school children	1,999	1,824	8,998	12,821	26,583	4,325	13,762
Number of nursing mothers attending clinic	231	1,692	1,370	3,293	4,507	370	1,214
Total attendance of nursing mothers	1,436	6,286	8,076	15,798	26,178	3,644	10,380
Number of expectant mothers attending clinic	33	—	2,809	2,842	2,941	99	99
Total attendance of expectant mothers	39	—	3,260	3,299	3,485	186	186
Number of post-natal cases attending clinic	—	—	—	—	29	29	29
Total attendance of post-natal cases	—	—	—	—	33	33	33
Number of test feeds given	42	83	64	189	917	359	728
Number of mothers instructed in treatment of minor ailments	489	2,491	4,645	7,625	9,864	871	2,239
Number of health talks and demonstrations given	758	4,512	4,421	3,691	16,089	1,972	6,398

*Of this figure 1,058 were children attended to at Nursery Schools and Homes for P

Protected Infants.

IMMUNIZATION.

	Europeans			
	Infants	Children	Adults	Total
Number of cases immunised against Diphtheria	23	75	—	98
Of these 83 completed the course of injections.				
Number of cases immunised against Whooping Cough	12	48	—	60
Of these 36 completed the course of injections				
Number of cases who received combined Diphtheria and Whooping Cough immunisation	222	201	—	423
Of these 326 completed the course of injections.				
Number of cases immunised against Typhoid	—	2	—	2

Vaccination.

Number of cases vaccinated against Smallpox:	Infants	Children	Adults	Total
European	402	243	478	1,123
Coloured	34	26	32	92
Native	151	62	237	450
Asiatic	601	1,490	1,500	3,591
	1,188	1,821	2,247	5,256

NO. OF CASES.

	E.	C.	N.	A.
Referred to Doctors	119	4	—	34
,, ,, Hospital	29	27	323	350
,, ,, District Nurses	2	—	—	—
,, ,, Societies	12	8	7	23
Passed for Day Nursery	45	12	4	—

PHYSICAL CULTURE.

	E.
July to November, 1944.	
No. of postures assessed	135
No. attending classes	118
Total attendance	833

ORTHOPAEDIC CASES
(From 24/8/45)

First visits	154
Re-visits	403
Clinics	165

EXAMINATION OF ENTRANTS TO SERVICE.

144 Female entrants to the Municipal Service were medically examined.

FOOD DISTRIBUTED.

	Gale Street and Mobile Clinics (Caravan and Vans)	Brook Street and Gale Street Centres and Mobile Clinics (Vans)		
	E.	C.	N.	A.
Number of cases receiving dried milk free	23	35	10	48
Amount of dried milk given free in lbs.	530	1,024	205	1,283
Number of cases receiving dried milk at cost and reduced prices	9	5	3	31
Amount of dried milk sold at cost and reduced prices in lbs.	246	81	14	895
Number of cases receiving cow's milk free	32	6	—	—
Amount of cow's milk given free in pints	8,444	2,421	—	—

BIRTHS.

Notifications :	E.	C.	N.	A.	Total.
DURBAN	1,655	194	1,034	1,174	4,057
GREENWOOD PARK	223	10	98	386	717
SYDENHAM	50	68	250	623	991
MAYVILLE	56	36	875	872	1,839
UMHLATUZANA	150	3	105	100	358
SOUTH COAST JUNCTION	200	49	264	829	1,342
	2,334	360	2,626	3,984	9,304
IMPORTED	323	18	2,239	186	2,766
TOTAL :	2,657	378	4,865	4,170	12,070

Number of **Illegitimate Births** occurring among those notified.

	E.	C.	N.	A.	Total.
DURBAN	56	27	55	10	148
GREENWOOD PARK	4	2	8	2	16
SYDENHAM	—	20	40	4	64
MAYVILLE	1	13	58	8	80
UMHLATUZANA	—	—	1	1	2
SOUTH COAST JUNCTION	2	6	3	3	14
	63	68	165	28	324
IMPORTED	5	4	148	1	158
TOTAL :	68	72	313	29	482

Still-Birth: Notifications.

	E.	C.	N.	A.	Total.
DURBAN	41	9	66	37	153
GREENWOOD PARK	6	—	6	6	18
SYDENHAM	1	2	12	15	30
MAYVILLE	2	4	57	41	104
UMHLATUZANA	5	—	13	5	23
SOUTH COAST JUNCTION	3	—	17	42	62
	58	15	171	146	390
IMPORTED	4	2	170	6	182
TOTAL :	62	17	341	152	572

Number of Illegitimate Stillbirths occurring among those registered.

	E.	C.	N.	A.	Total.
DURBAN	1	2	4	—	7
GREENWOOD PARK	—	—	3	1	4
SYDENHAM	—	—	3	—	3
MAYVILLE	1	3	7	—	11
UMHLATUZANA	—	—	—	—	—
SOUTH COAST JUNCTION	—	—	—	—	—
	2	5	17	1	25
IMPORTED	—	1	10	—	11
TOTAL :	2	6	27	1	36

Registrations.

	E.	C.	N.	A.	Total.
DURBAN	1,642	220	813	1,007	3,682
GREENWOOD PARK	212	12	88	527	839
SYDENHAM	57	72	202	791	1,122
MAYVILLE	57	48	876	921	1,902
UMHLATUZANA	168	7	132	200	507
SOUTH COAST JUNCTION	198	81	277	1,151	1,707
	2,334	440	2,388	4,597	9,759
IMPORTED	327	27	2,443	190	2,987
TOTAL :	2,661	467	4,831	4,787	12,746

Birth Rate.

E.	C.	N.	A.
21.32	48.96	33.23	46.36

Number of **Illegitimate Births** occurring among those registered.

	E.	C.	N.	A.	Total.
DURBAN	69	60	526	14	669
GREENWOOD PARK	5	5	58	7	75
SYDENHAM	1	27	118	6	152
MAYVILLE	3	20	478	15	516
UMHLATUZANA	2	3	80	1	86
SOUTH COAST JUNCTION	5	21	145	15	186
	85	136	1,405	58	1,684
IMPORTED	8	11	1,068	4	1,091
TOTAL :	93	147	2,473	62	2,775

Stillbirths — Registrations.

	E.	C.	N.	A.	Total.
DURBAN	47	9	63	43	162
GREENWOOD PARK	8	—	11	18	37
SYDENHAM	1	4	14	28	47
MAYVILLE	1	6	128	51	186
UMHLATUZANA	5	—	15	11	31
SOUTH COAST JUNCTION	5	6	33	53	97
	67	25	264	204	560
IMPORTED	5	1	208	7	221
TOTAL :	72	26	472	211	781

Number of **Illegitimate Stillbirths** occurring among those registered.

	E.	C.	N.	A.	Total.
DURBAN	1	4	44	—	49
GREENWOOD PARK	—	—	11	—	11
SYDENHAM	—	1	6	—	7
MAYVILLE	—	4	51	—	55
UMHLATUZANA	—	—	13	—	13
SOUTH COAST JUNCTION	—	2	16	—	18
	1	11	141	—	153
IMPORTED	1	1	94	—	96
TOTAL :	2	12	235	—	249

Stillbirth Rate or number of stillbirths per 1,000 live and stillbirths.

	No. of Stillbirths.	No. of Live Births.	Total.	Stillbirth Rate.
EUROPEANS	67	2,334	2,401	27.9
COLOUREDS	25	440	465	53.7
NATIVES	264	2,388	2,652	99.54
ASIATICS	204	4,597	4,801	42.49

INFANTILE DEATHS.

	E.	C.	N.	A.	Total
DURBAN	55	24	192	102	373
GREENWOOD PARK	3	3	52	36	94
SYDENHAM	1	9	64	88	162
MAYVILLE	3	13	462	99	577
UMHLATUZANA	5	2	47	10	64
SOUTH COAST JUNCTION	3	7	112	121	243
	70	58	929	456	1,513
IMPORTED	15	5	524	24	568
TOTAL :	85	63	1,453	480	2,081

Infantile Mortality Rate or number of infant deaths per 1,000 births.

	Number of Deaths			Number of Live Births			Mortality
	Male	Female	Total	Male	Female	Total	Rate.
EUROPEAN	41	29	70	1,217	1,117	2,334	29.99
COLOURED	32	26	58	233	207	440	131.81
NATIVE	486	443	929	1,234	1,154	2,388	389.02
ASIATIC	218	238	456	2,335	2,267	4,597	99.19

Number of infants who died, who had previously attended clinic or had been visited by a health visitor :

E.	C.	N.	A.
1	6	6	22

Attended only.				Health Visited only.				Health Visited and Attended.			
E.	C.	N.	A.	E.	C.	N.	A.	E.	C.	N.	A.
1	3	3	21	—	2	1	—	—	1	2	1

CAUSES OF INFANTILE DEATHS.

EUROPEANS:

Cause.	Weeks			Months			Total
	0-1	1-2	2-4	1-3	3-6	6-12	
Prematurity	19	3	—	2	—	—	24
Intra-cranial haemorrhage	3	1	—	—	—	—	4
Congenital Malformations	7	—	1	1	1	—	10
Congenital Atelectasis	4	—	1	—	—	—	5
Tetanus Neonatorum	1	—	—	—	—	—	1
Other Diseases peculiar to Infancy	2	—	—	—	—	—	2
Gastro Enteritis	—	—	—	1	2	3	6
Other Diseases of the Intestines	—	—	—	—	1	—	1
Rickets	—	—	—	—	—	1	1
Broncho Pneumonia	—	2	1	1	1	5	10
Pleurisy	—	—	—	1	—	—	1
Congenital Syphilis	—	—	—	—	—	1	1
Diphtheria	—	—	—	—	—	1	1
Osteomyelitis	—	—	—	—	1	—	1
Whooping Cough	—	—	—	—	1	—	1
Meningitis	—	—	—	—	—	1	1
TOTAL :	36	6	3	6	7	12	70

	Weeks			Months			
COLOUREDS:	0-1	1-2	2-4	1-3	3-6	6-12	Total
Prematurity	4	1	1	1	1	—	8
Intra-cranial haemorrhage	4	—	—	—	—	—	4
Congenital Malformations	2	—	—	2	—	—	4
Congenital Debility	3	—	—	—	—	—	3
Other Diseases peculiar to Infancy	1	—	—	—	—	—	1
Gastro Enteritis	—	—	—	4	3	8	15
Bacillary Dysentery	—	—	—	1	1	1	3
Pyelitis	—	—	—	—	1	—	1
Bronchitis	—	—	—	—	—	2	2
Broncho Pneumonia	—	—	1	1	1	5	8
Lobar Pneumonia	—	—	—	1	—	1	2
Pulmonary Tuberculosis	—	—	—	—	1	1	2
Smallpox	—	—	—	—	1	—	1
Ulceration of Intestines	—	—	—	—	—	1	1
Tuberculous Meningitis	—	—	—	—	—	1	1
Purulent Infection and Septicaemia	—	—	—	—	—	1	1
Natural Causes	1	—	—	—	—	—	1
TOTAL:	15	1	2	10	9	21	58

NATIVES:

Cause.

Prematurity	54	15	8	3	—	—	80
Intra-cranial haemorrhage	12	2	—	—	—	1	15
Other Birth Injuries	—	1	—	—	—	—	1
Malaena Neonatorum	1	1	—	—	—	—	2
Congenital Malformations	3	1	1	2	—	—	7
Congenital Debility	52	10	4	11	5	3	85
Pemphigus Neonatorum	—	—	—	—	—	1	1
Tetanus Neonatorum	1	8	—	—	—	—	9
Other Diseases peculiar to Infancy	6	6	2	1	—	—	15
Gastro Enteritis	1	5	10	43	76	133	268
Bacillary Dysentery	—	—	—	—	1	4	5
Amoebic Dysentery	—	—	—	—	—	8	8
Typhoid Fever	—	—	—	—	—	2	2
Intestinal Obstruction	—	—	—	—	1	—	1
Nephritis	—	—	1	—	—	—	1
Other Diseases of the Kidneys	—	—	—	—	1	—	1
Malnutrition	—	1	1	9	5	3	19
Nutritional Oedema	—	—	—	1	1	3	5
Rickets	—	—	—	—	1	—	1
Bronchitis	1	3	3	14	15	19	55
Broncho Pneumonia	5	15	16	43	55	127	261
Lobar Pneumonia	—	1	1	1	6	5	14
Pleurisy	—	—	—	—	2	3	5
Pulmonary Tuberculosis	—	—	—	—	1	4	5
T.B. Meningitis	—	—	—	—	—	1	1
Miliary Tuberculosis	—	—	—	—	1	2	3
Congenital Syphilis	6	2	2	8	4	4	26
Diphtheria	—	—	—	—	1	3	4
Measles	—	—	—	—	—	1	1
Poliomyelitis	—	—	—	2	—	3	5
Smallpox	—	—	—	—	3	2	5
Whooping Cough	—	—	—	—	1	4	5
Mumps	—	—	—	—	1	—	1
Meningitis	—	2	—	—	—	2	4
Diseases of the Ear	—	—	—	—	1	3	4
Diseases of the Arteries	—	1	—	—	—	—	1
Unspecified anaemia	1	—	—	—	—	—	1
Accidental Burns	—	—	—	—	—	1	1
Found Dead—cause unknown	1	—	—	—	—	—	1
TOTAL:	144	74	49	138	182	342	929

ASIATICS:

Prematurity	28	8	6	5	—	—	47
Intra-cranial Haemorrhage	5	—	—	—	—	—	5
Malaena Neonatorum	2	—	—	—	—	—	2
Congenital Malformations	2	—	—	3	—	—	5
Congenital Atelectasis	10	—	—	—	—	—	10
Congenital Debility	39	13	13	11	3	1	80
Intoxication due to Maternal Toxaemia	1	—	—	—	—	—	1
Gastro Enteritis	2	—	3	14	19	28	66
Bacillary Dysentery	—	—	—	1	—	2	3
Helminths	—	—	—	—	1	—	1
Jaundice	—	—	—	1	—	—	1
Nephritis	—	—	—	—	—	3	3
Malnutrition	—	—	2	5	33	—	10

	Weeks 0-1	1-2	2-4	Months 1-3	3-6	6-12	Total
Nutritional Oedema	—	—	—	1	—	—	1
Rickets	—	—	—	—	1	2	3
Bronchitis	2	1	7	13	5	13	41
Broncho Pneumonia	2	1	2	19	17	45	86
Lobar Pneumonia	—	—	—	6	3	13	22
Congestion of the Lungs	2	—	—	2	1	2	7
Coryza	3	4	3	2	1	1	14
Influenza	—	—	—	—	—	1	1
Pulmonary Tuberculosis	—	—	—	—	—	3	3
Tuberculosis Meningitis	—	—	—	1	—	—	1
Miliary Tuberculosis	—	—	—	—	1	—	1
Congenital Syphilis	3	1	1	1	1	1	8
Diphtheria	—	—	—	—	—	1	1
Poliomyelitis	—	—	—	—	—	1	1
Smallpox	1	—	2	3	4	5	15
Whooping Cough	—	—	—	—	—	4	4
Meningitis	—	—	—	—	—	4	4
Convulsions	—	1	—	1	2	1	5
Diseases of the Skin	—	—	1	—	—	—	1
Accidental Burns	—	—	1	—	—	1	2
Natural Causes	—	—	—	—	—	1	1
	102	29	41	89	62	133	456

FEEDING OF INFANTS WHO DIED FROM:—

Enteritis.	E.	C.	N.	A.	Total
Breast Fed	—	2	9	8	19
Breast Fed with cow's milk	—	—	1	—	1
Breast Fed with Dried Milk	—	—	—	1	1
Breast Fed with sweetened condensed milk	—	—	—	3	3
Breast Fed with cereal	—	—	4	—	4
Breast Fed with Extras	—	—	1	—	1
Cow's milk	—	3	3	2	8
Cow's Milk with Cereal	1	2	4	3	10
Dried milk	2	1	2	4	9
Dried milk with cereal	2	1	—	1	4
Sweetened condensed milk	—	—	2	3	5
Sweetened Condensed Milk with Cereal	1	—	—	2	3
Unable to trace	—	6	242	39	287
TOTAL:	6	15	268	66	355

Malnutrition, Nutritional Oedema and Rickets.	E.	C.	N.	A.	Total
Breast Fed	—	—	2	—	2
Breast fed with cereal	—	—	—	1	1
Cow's Milk with Cereal	—	—	—	2	2
Sweetened Condensed Milk	—	—	—	1	1
Cereal	—	—	1	—	1
Unable to trace	1	—	22	10	33
TOTAL:	1	—	25	14	40

MATERNAL MORTALITY.

Maternal Mortality or number of maternal deaths per 1,000 births.

	Number of Deaths from Causes due to Childbirth	Number of Births Live	Still	Total	Death Rate on Live Births	Death Rate on Live and Stillbirths
Europeans	5	2,334	67	2,401	2.14	2.08
Coloureds	2	440	25	465	4.54	4.3
Natives	16	2,388	264	2,652	6.7	6.03
Asiatics	22	4,597	204	4,801	4.78	4.58

Maternal Deaths attended by:	E.	C.	N.	A.	Total.
Doctor	—	—	—	1	1
Midwife	—	—	—	7	7
Born at home — removed to hospital —	—	—	—	1	1
No midwife or doctor	—	—	—	4	4
Hospital or Nursing Home	5	2	12	8	27
No Particulars	—	—	4	1	5
TOTAL:	5	2	16	22	45

Causes of Maternal Deaths :	E.	C.	N.	A.	Total.
Puerperal Sepsis	—	—	4	14	18
Toxaemia	—	—	4	—	4
Eclampsia	—	—	1	3	4
Ectopic Gestation	—	—	2	—	2
Post-partum Haemorrhage	—	—	3	—	3
Ante-partum Haemorrhage	—	—	—	1	1
Abortion (haemorrhage)	—	—	1	1	2
Septicaemia (miscarriage)	—	2	—	—	2
Acute dilation of stomach following Caesarian Section	—	—	1	—	1
Ruptured Uterus	—	—	—	1	1
Nephritis	—	—	—	2	2
Obstetric shock	1	—	—	—	1
Pulmonary Embolism — Pelvic Thrombosis	2	—	—	—	2
Congenital Cardiac Failure—Mitral Stenosis	1	—	—	—	1
Paralytic Ileus	1	—	—	—	1
TOTAL :	5	2	16	22	45

SUPERVISION OF MIDWIVES' WORK.

Midwives.	E.	C.	N.	A.	Total
No. of certificated midwives practising in Durban	33	1	—	—	34
No. of certificated midwives who have ceased to practise in Durban	6	—	—	—	6
No. of certificated midwives deceased	1	—	—	—	1
No. of certificated midwives unable to trace	1	—	—	—	1
No. of uncertificated midwives practising in Durban	8	1	1	148	158
No. of uncertificated midwives who have ceased to practise ro who cannot be traced	2	—	1	3	6
No. of uncertificated midwives deceased	—	—	—	5	5
No. of women found to be practising midwifery who have been warned not to do so unless they apply to be put on the list	—	—	1	11	12
No. of women who have been convicted for practising midwifery after their names have been removed from the list	—	1	—	—	1

Supervision of Midwives.

No. midwives' appliances examined	107	10	1	1,493	1,611
No. of midwives' bags replenished	—	14	—	1,905	1,919
No. of midwives' dressings sterilized	—	15	1	2,376	2,392
No. of midwives' bags sterilized after septic cases	—	—	—	16	16
No. of visits to midwives at their homes or at patients' houses	13	8	—	48	69

Certificated practising midwives' registers are examined every three months and their appliances every six months.

Uncertificated practising European and Coloured midwives' appliances and registers are examined every three months.

Uncertificated practising Native and Indian midwives' appliances are examined every month.

Tuition.	E.	C.	N.	A.	Total
No. of lectures and demonstrations given uncertificated midwives	—	—	—	19	19
No. of times maternity film shown	4	—	—	3	7
No. of uncertificated midwives attending classes	—	—	—	6	6
No. of untrained midwives examined	—	—	—	6	6
No. of uncertificated midwives passed examination	—	—	—	6	6

Maternity bags are equipped and sold to untrained midwives who have attended the full course of lectures and demonstrations and passed the examination set by the Child Health Clinic.

Takings for maternity bags during the year amounted to £3 15s. 0d.

Inspection of Nursing Homes and Lying-in-Home Registers.

	E.	C.	N.	A.	Total
No. of homes inspected	13	—	2	1	16
No. of times homes inspected	48	—	10	5	63

Ante-Natal Work.

No. of expectant mothers attending clinic	99	33	—	2,809	2,941
Total No. of attendances	186	39	—	3,260	3,485
No. of ante-natal sessions	24	11	—	99	134
No. of ante-natal visits	170	45	489	448	1,152
No. of post-natal visits	12	5	—	28	45

Other Visits.

No. of cases of Puerperal Sepsis	3	—	5	14	22
No. of visits of cases of Puerperal Sepsis	6	—	5	24	35
No. of Maternal Deaths	3	3	14	26	46
No. of visits in connection with Maternal Deaths	7	5	18	35	65
No. of cases of Ophthalmia Neonatorum	7	3	57	29	96
No. of visits to cases of Ophthalmia Neonatorum	22	9	97	44	172
No. of Stillbirths	21	9	154	123	307
No. of visits in connection with Stillbirths	21	9	186	130	346
Other visits	56	—	—	—	56

HEALTH VISITORS WORK.

Infants under 1 year :		E.	C.	N.	A.	Total.
First visits — Feeding	Breast	952	353	5,970	2,326	9,601
	Mixed	81	16	466	217	780
	Artificial	212	47	51	144	454
	TOTAL :	1,245	416	6,487	2,687	10,835
Re-visits — Feeding	Breast	1,233	380	760	2,937	5,310
	Mixed	740	114	1,073	1,723	3,650
	Artificial	1,520	419	67	1,001	3,007
	TOTAL :	3,493	913	1,900	5,661	11,967

Older Children :	E.	C.	N.	A.	Total.
First visits	336	152	1,912	3,535	5,935
Re-visits	5,761	1,620	4,985	11,337	23,703
TOTAL :	6,097	1,772	6,897	14,872	29,638

No. of above visits made to Protected Infants	273	51	—	—	324

Other visits :	E.	C.	N.	A.	Total.
Infant deaths	27	15	104	130	276
Infectious Diseases or Contacts	12	1	2	11	26
Reports on insanitary conditions	22	—	3	13	38
No. of visits to Nursery Schools and Homes for Protected Infants	45	—	—	—	45
Lectures and demonstrations to students	30	—	—	—	30
TOTAL :	136	16	109	154	415

	E.	C.	N.	A.	Total
No. of Infants under 1 year visited	1,789	596	7,098	2,694	12,177

TOTAL VISITS.

First visits — Infants	10,835
Re-visits — Infants	11,967
Older children	29,638
Other visits	415
Total	52,855

Dental Caries.

	E.	C.	N.	A.	Total
No. of children found to be suffering from dental caries	93	8	85	17	203
No. of cases of dental caries which received attention	76	2	6	6	90

14. PROSECUTIONS: The subjoined table sets out the record of prosecutions instituted by the Department.

Legislation Contravened	Bhgt. fwd.	New	Guilty	Not Guilty	Withdrawn	Pending	Fines
Public Health By-laws :							
Nuisances :							
Use of food stores/shops for sleeping	—	6	5	1	—	—	(1) 33 10 0
Unclean food stores/shops	—	2	2	—	—	—	9 0 0
Unclean yards, drains etc.	2	16	13	—	—	5	98 10 0
Improper depositing of refuse	—	3	2	—	—	1	4 0 0
Unclean premises	—	2	2	—	—	—	8 0 0
Defective Drains	—	9	6	—	1	2	18 0 0
„ Privies	—	5	5	—	—	—	15 0 0
„ Dwellings	—	11	6	1	—	4	43 0 0
Fly development	—	2	1	—	1	—	3 0 0
Non-compliance with Closing Order	—	1	1	—	—	—	3 0 0
Slaughtering of animals :							
Unauthorised slaughtering	—	2	2	—	—	—	4 10 0
Manufacture, Storage and Sale of Food :							
Unhygienic delivery	4	15	17	1	1	—	(2) 73 0 0
Hairdressers :							
Failure to wear overall garment	—	1	1	—	—	—	2 0 0
Dairies and Milk Depots :							
Trading without registration	—	7	7	—	—	—	39 0 0
Transfer of milk in street, etc.	2	4	6	—	—	—	30 10 0
Milk below bacterial standard	—	31	24	—	3	4	59 0 0
Building By-laws :							
Use of unauthorised buildings, etc. as dwellings	—	9	7	1	—	1	28 10 0
Abattoir By-laws :							
Unauthorised introduction of meat	—	2	2	—	—	—	11 0 0
Public Health Act :							
Failure to attend V.D. Clinic	1	2	3	—	—	—	(3)(4)16 0 0
Contamination of foodstuffs	—	10	8	—	2	—	45 0 0
Rodent Infestation Regulations :							
(Rodent harbourage)	1	1	1	—	—	1	4 0 0
Fumigation Regulations :							
Sundry breaches	—	3	1	1	—	1	1 10 0
Midwifery Regulations: Unregistered practice	—	1	1	—	—	—	(6) 5 0 0
Smallpox Regulations:							
(Concealment of Smallpox cases)	—	22	22	—	—	—	491 0 0
Typhus Regulations :							
(Refusal to be deverminised)	—	1	1	—	—	—	7 10 0
Slums Act — Zonal Regulations :	11	64	51	2	1	21	(7) 422 0 0
Food, Drugs and Disinfectant Act :							
Milk below chemical standard	—	6	6	—	—	—	29 10 0
Sausages below chemical standard	—	1	1	—	—	—	5 0 0
	21	239	204	7	9	40	(8)1,509 0 0
	—	255	219	3	7	26	£736 10 0

(1) £9. Suspended.
(2) £6. Suspended.
(3) £16. Suspended for 2 years.
(4) 1 case—6 wks. H.L. Suspended 2 years.
(5) 1 case—6 wks. H.L.
(6) Suspended, pending appeal.
(7) £3. Suspended.
(8) Includes £39. Suspended.

15. OTHER MATTERS OF HEALTH AND SANITATION:
Inspections by District Inspectors.

Hotels, boarding houses and lodging houses	1,992	(1,876)
Restaurants, tearooms and eating houses	1,636	(2,661)
Bakeries	33	(120)
Butcheries	503	(1,553)
Dairies and Milk Depots.	1,183	(1,566)
Laundries	253	(506)
Markets	390	(468)
Offensive Trades	106	(198)
General	17,625	(23,039)
	23,721	(31,987)
Complaints received and investigated	3,341	(3,143)
Notices issued — Personal	1,767	(2,311)
do. Written	3,066	(4,079)
Reports on applications for licences	11,019	(10,501)
TOTAL	19,193	(20,034)

Additional to the above activities, Health Inspectors were freely seconded for vaccination duties during the Smallpox outbreak.

Examination of Building Plans: During the period under review it has been evident that the building trade was reverting to normal conditions notwithstanding the fact that essential materials were in short supply. There are indications, however, that the position is improving.

In addition to numerous preliminary lay-outs, the number of plans officially submitted to this Department was 1,838 as compared with 1,596 plans during 1943/44. Final approval was given in respect of 1,316 plans (£1,352,158).

Values, however, show an enormous increase, the relative figures being as follows:

1943-44: £522,752
1944-45: £1,352,158

Distribution of Plans:

Old Borough	707	Mayville	283
Greenwood Park	312	Umhlatuzana	95
Sydenham	189	South Coast Junction	247
		Total	1,833

Normal site and building inspections were carried out in all parts of the City, otfen in co-operation with architects, owners and co-officials of the Municipal Service. Building schemes in embryo have often been examined and discussed in business offices.

Co-operation with other officials and the public has been a prime factor in attaining improvements, sometimes on matters outwith the scope of by-laws and regulations.

Some difficulty was experienced from the fact that dwellings erected under the aegis of the various Housing Schemes are not subject to Municipal By-laws, whereas the owner operating through other channels is expected to comply with established building codes. The layman cannot understand the distinction and voices the opinion that Municipal By-laws either are too harsh or alternatively that relaxation of standards is detrimental to the health and well-being of future occupants.

TABLE SHOWING PARTICULARS RE PLANS

Month	Dwellings		Flats		Additions to Dwellings and Flats		Stores, Shops, Factories and Offices		Additions to Stores, Shops, Factories and Offices		Clubs, Halls and Hotels		Additions to Clubs, Halls and Hotels		Total	
	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	Plans	Value
1944																
July	26	30,727	1	18,000	33	6,352	5	44,630	14	9,432	3	19,621	5	10,776	87	139,538
August	20	28,530	1	28,560	43	5,425	1	3,000	4	319	—	—	6	769	75	66,603
September	22	35,297	—	—	44	5,324	3	35,554	16	4,678	—	—	5	1,979	90	82,832
October	26	47,326	—	—	26	3,273	—	—	6	6,913	—	—	3	608	61	58,120
November	26	41,410	—	—	53	7,702	—	—	16	11,343	1	4,800	6	1,194	102	66,449
December	22	119,020	—	—	23	2,467	3	50,100	1	3,250	—	—	2	570	51	175,407
1945																
January	43	62,566	1	29,500	68	9,722	6	8,332	20	7,138	—	—	4	1,148	142	118,406
February	45	162,045	1	5,000	70	11,243	4	5,950	26	7,743	1	3,500	2	865	149	196,346
March	43	58,162	1	10,000	66	9,648	3	4,500	24	4,925	—	—	—	—	137	87,235
April	44	63,290	—	—	55	9,551	4	7,360	14	4,315	2	25,000	3	807	122	110,323
May	39	62,931	—	—	45	5,929	3	4,848	6	2,406	1	4,303	1	92	95	80,509
June	91	140,758	—	—	93	14,478	1	500	14	7,057	1	4,132	5	3,465	205	170,390
	447	852,062	5	91,060	619	91,114	33	164,774	161	69,519	9	61,356	42	22,273	1,316	1,352,158

16. CITY HEALTH STAFF.

Administration and Inspectional :

1 City Medical Officer of Health	Gunn, Dr. G. H., M.D. Ch.B., D.P.H.
1 Asst. Medical Officer of Health (Actg. T.B. Officer).	Hooper, Dr. D. H., M.B., Ch.B., D.P.H.
1 Clinical Medical Officer	Casson, Dr. M., M.R.C.S. (Eng.) L.R.C.P. (Lond).
1 Venereologist	Wallace, Dr. G. D. H., M.D., D.P.H., M.R.C.S. L.R.C.P.
1 Asst. Medical Officer of Health	Edwards, Dr. H. S., M.D., Ch.B., D.P.H.
1 Veterinary Officer	Harber, A. F. Lt. Col., M.R.C.V.S.
1 Bantu Medical Officer	Dhlamini, Dr. C. N., L.R.C.P. (Edin.) L.R.F.P.S. (Glas.) L.R.C.S. (Edin.)
1 Indian (female) Medical Officer (part time)	Ismail, Dr. M., M.B., Ch.B.
1 Administrative Officer.	Boutle, R. E., R.S.I.
1 Chief Health Inspector	Michie, A. A., R.S.I
1 Chief Clerk.	
7 Divisional Specialist Health Inspectors.	
14 District Inspectors.	
10 Health Visitors.	
7 Clerks.	
7 Clerical Assistants.	
7 Typists.	
1 Enquiry Clerk.	

Non-European.

1 Indian interpreter.
6 Indian messengers.

City Fever Hospital.

1 Matron	Ewels, Miss E. M.
1 Assistant Matron	
13 Sisters.	
1 Housekeeper.	
1 Seamstress.	
1 General Assistant.	

Non-European.

1 Indian Sirdar.
40 ,, Orderlies.
1 ,, Female Assistant.
11 Native Watchmen and Labourers.
15 Native Nurses.

Disinfecting Station and Laundry.

1 Superintendent	Morning, C. D.
1 Disinfector.	
1 Laundryman.	
4 Driers.	

Non-European.

3 Indian Sorters.
21 ,, Ironers.
31 ,, Calendar hands.
3 Indian Ambulance attendants.
4 Indian Boiler attendants.
3 Native Van attendants.

Child Health.

1 Medical Officer in Charge	McNeil, Dr. K. N., M.B., Ch.B., D.P.H.
1 Asst. Medical Officer	Chapman, Dr. L., M.B., Ch.B., B.Sc., D.P.H.
1 Clinic Matron.	
1 Supervisor of Midwives.	
1 Assistant Supervisor of Midwives.	
14 Health Visitors.	
5 Clinic Assistants.	
1 Clerk.	
1 Typiste.	

Non-European.

5 Indian Health Visitors (female).
2 Native ,, ,, ,,
3 Native Messengers.
4 Indian Messengers.

Laboratory:

1 Pathologist	Sampson, Dr. B. F., M.R.C.S., L.R.C.P., M.B., B.S.

Pest Control.

1 Supervisor	Stewart, R. O., R.S.I.
1 Field Supervisor	
1 Senior Overseer.	
8 Overseers.	
17 Patrolmen.	
1 Assistant Chemist.	

Non-European.

2 Indian Sirdars.
40 ,, Labourers.
8 Native Health Assistants.
23 Native Labourers.

INFECTIOUS DISEASE AND T.B. CONTROL.

Non-European.

6 Indian Health Assistants.
6 Native Health Assistants.

V.D. CONTROL.

Non-European.

1 Indian Health Assistant.
6 Native Health Assistants.
2 Native Clerks.
3 Native Nurses (Female).
1 Native Dispenser.
3 Native Orderlies.
2 Native Assistants.

HEALTH EDUCATION.

Non-European.

2 Native Health Assistants.

REPORT "B."

SLUMS AND HOUSING.

Although the organisation of schemes for the construction of new housing has occupied much of the City Council's attention during the past year, time and effort have been lost by reason of mounting difficulties—administrative, technical and financial—which beset the path of progress. Despite monumental efforts, there is little or nothing to show in the shape of new accommodation, wherefore it must again be recorded that the general housing position is, if anything, worse than it was a year ago. Taken together, the passing of the Housing (Emergency Powers) Act and Regulations, and the appointment of the Natal Housing Board offer hope that traditional and obsolete methods of tackling the housing problem will now make room for something better and that many of the difficulties hitherto encountered will disappear. However, at the best, it must remain obvious that there are limits to South African productive capacity in the field of new housing over any given period. A main difficulty will be shortage of man-power in the building industry. It is therefore likely that the majority of slum-dwellers will be compelled, for an indefinite period, to continue occupation of sub-standard housing. In the meantime, in order to safeguard the public health from the menace inherent in shack settlement, it becomes imperative to adopt an active and positive policy of "organising the slums" on the basis of "interim housing" under properly controlled conditions. These include the provision of "basic" protective measures such as a wholesome water supply, approved latrine accommodation and suitable means for disposal of household refuse and waste water, supplemented by programmes of immunisation, health education, pest control and sanitary supervision.

Immigration of Indian and Native families from the country and smaller communities to the City still continues unabated. The end of hostilities may decrease prospects of ready and more remunerative employment and lessen the flow of rural populations to the large urban centres, although it is more likely that the migratory process is inseparable from the present stage of South African industrial development. The industrial age is on its way in South Africa and is likely to continue unchecked thanks to the stimulus derived from poverty and poor living conditions which generally prevail in rural areas. As long as urban life presents a glimmer of hope of improved economic and social conditions, so long will this displacement of population continue. It seems clear that industrialisation will compel the concentration of the bulk of the country's low-income families, of all races, in and around the towns. Thus, unless a national policy be adopted of uplifting the depressed classes to an economic standard of living, it is not inconceivable that the burden upon the rate-paying elements of providing sub-economic housing may well prove insupportable. Briefly, the present policy of sub-economic housing amounts to nothing more nor less than subsidisation of industry by the rate-payers of the towns.

Housing Survey: The results of the cross-section housing survey undertaken by the Natal University College on behalf of the City Council have not come to hand in time for inclusion in this Report.

Slum Areas: The slums in the City can conveniently be dealt with under two main headings, (a) those oin central areas, comprising old-established "built-up" premises which have deteriorated to a "sub-standard" condition over a considerable period and (b) those in suburban areas consisting principally of shack dwellings.

Central Areas Slums: The condition of these slums shows no marked change and, until new housing becomes freely available, it will not be possible to embark upon slum-clearance projects. Meantime, very useful work is being done to ensure that "sub-standard" dwellings conform to the minimum sanitary standards adopted by the Department as a war-time measure.

In the seven slum zones of the Old Borough as defined in the Zonal Regulations framed under Section 32 (1) (b) of the Slums Act, sustained efforts to prevent a further deterioration in the condition of dwellings have had considerable success.

Suburban Slums: The existence of extensive shack settlements in the suburban areas, some dating to pre-incorporation days, and others, such as Booth Road, to the war years, presents the City Council with its greatest slum clearance and housing problem. The inhabitants of shack settlements are comprised almost wholly of families who are incapable of helping themselves to acquire a dwelling of normal type and construction. Consequently, the onus of re-housing them becomes a formidable burden which must prove too heavy to be borne by the Local Authority.

First attempts to compel owners of shack-built land to provide "basic sanitation," in terms of the City Council's instructions, were brought to a virtual standstill by protracted litigation connected with a "test" prosecution. Finality was eventually reached, in a judgment given by the Supreme Court favourable to the City Council, and since then an active programme of dealing with offending land-owners has been pursued. However, the success attending numerous prosecutions for failure to provide basic sanitary amenities, is apt to be illusory in that, as yet, there has been no single instance of a shack landlord undertaking the supply of water or sanitary services to his tenants. Having found that the business of letting land to squatters involves legal and financial commitments in the provision and supervision of amenities, the landowner seeks, by every means, to evict his squatter tenants. That wholesale evictions have so far not eventuated is doubtless due to the reluctance of Courts to grant ejectment orders. Should this obstacle be surmounted, however, there is a grave risk of the shack-dwelling population, which is presently congregated in fairly well-defined localities, becoming scattered throughout the suburban and adjacent areas of the City, with risks to the health of the general community which need no elaboration.

Whilst the unauthorised erection of shacks has been curbed, for the time being, the practice has not yet been stopped. Minor "outbreaks" are still being discovered in isolated and often hitherto uninhabited localities which are extremely difficult of access and beyond the reach of existing Municipal water and sanitary services. Unless this practice of throwing up shack settlements can be completely suppressed, the growing non-European population of

the City will remain unhoused except in shacks affording shelter only and no safeguard against the development of grave epidemic diseases unless such safeguards, in the form of water and sanitary services are provided by the Local Authority.

Slum Clearance: The City Council's 1940 policy of intermitting the demolition of slum dwellings still obtains in the absence of any alternative.

Demolition of shanty dwellings on Council's Springfield Estate has almost been completed, consequent upon re-housing of the occupants in the new Springfield Housing Scheme, leaving only about fifty shanties to be dealt with.

A start was made with the re-housing of eligible Native families from the Booth Road Slum such that by the end of the year 154 families had been accommodated in the "Chesterville" Housing Scheme. The shack dwellings previously occupied by re-housed families were either demolished or are in process of demolition.

Prosecutions: 64 Prosecutions were instituted for contraventions of the Slums (Zonal) Regulations.

New Housing Estate: During the year the provision of new Municipal housing progressed as follows:

(i) **European:**

Partly-Paid Land Housing Scheme

Houses completed	152
Houses commenced or awaitinge commencement	38

Flats for Ex-Volunteers

A commencement was made in the preparation of sites and tenders called for the erection of portion of this scheme. Complete scheme provides for 500 flats.

Woodlands Housing Scheme

Formation of road-hardening works commenced. Tenders called for first 100 dwellings.

Dwellings proposed in present scheme	1,100

(ii) **Indian:**

Springfield Economic and Sub-Economic Schemes

Dwellings completed and occupied	221
Dwellings under construction or about to be commenced	269
Dwellings to be erected under scheme	1,400

(iii) **Coloured:**

Sparks' Estate

Excavation, levelling and general road formation works in hand.

(iv) **Native:**

Chesterville (Blackhurst) Scheme

Houses completed and occupied or ready for occupation	940
Houses completed but not yet occupied (awaiting sewerage)	149
Houses under construction or still to be commenced	178

(v) **Merebank Native Men's Hostel:** Construction commenced on five blocks of buildings which will accommodate 2,400 Natives. The completed scheme will provide accommodation for 4,800 Natives in all.

Housing Management. During the year the Council advertised for an "Octavia Hill-trained" Housing Manageress but, on account of the very limited number of suitably-trained personnel available in South Africa, the post has not yet been filled. The proper care, supervision and maintenance of the Corporation's housing schemes has become a matter of urgency.

Town Planning. The Town-Planning Consultant engaged by the City Council to investigate the programme of Post-War Development, his submitted his report and this is now under consideration by the Council. The report covers the following headings:

1. Housing Proposals and Regional Zoning;
2. Trunk Road System and Transport Routes;
3. Re-planning of Point Area – (a) Bell Street district;
   (b) Point Lanes;
4. Ocean Beach Development Scheme;
5. Botha Gardens Scheme for Civic and Cultural Centre;
6. City Hall and Aliwal Street Re-planning Scheme;
7. Municipal Depots and District Centres.

Magazine Barracks. No progress has been made with the proposal to convert the blocks of brick barracks to self-contained flats or to provide new accommodation to replace the existing wood and iron buildings. These works have been hampered by the difficulties attendant upon war-time shortages of building materials and other problems connected with the acquisition of suitable land for the establishment of new Indian housing schemes.

The declared policy of the Council is ultimately to house only essential workers at the Magazine Barracks and to accommodate all others in cottages sited in a township scheme in a suburban area. With the conclusion of hostilities, resulting in an improvement in regard to labour and materials in the building industry, it is trusted that the elimination of this slum will be advanced on the works priority list.

The provision of communal ablution and laundry facilities equipped with hot water installation has not yet eventuated and consequently a sorely needed service for the maintenance of personal cleanliness is still lacking.

"Bored-hole" Latrines. An expenditure of £150 on the construction of 12 experimental "bored-hole" latrines has been authorised.

The "bored-hole" type of latrine is one which has been extensively adopted with conspicuous success in a number of Near and Far Eastern countries, the West Indies and Philippine Islands. There appears to be a wide field for its application in Natal to outlying and undeveloped localities such as occur in parts of the Durban Municipal Area which contain "shanty settlements" and which cannot at present or in the near future be linked up with the Municipal stercus removal service or water-borne sewerage. Unfortunately, the difficulty of obtaining a suitable plant for drilling boreholes has prevented progress being made with the experimental latrines authorised, but it is expected that suitable proposed plant will be forthcoming shortly.

Housing of Railway Indian and Coloured Employees. It has been agreed between the South African Railways Administration and the City Council that the Corporation, as Housing Authority, will provide housing for Coloured and Indian Railway employees on the basis of rentals being guaranteed by the Railway Administration.

Sanitary Control Centre—Booth Road Slum. It is proposed to establish a sanitary control centre in premises conveniently situated to the Booth Road slum area which comprises the major shack settlement in the City. A field hygiene unit, whose function will be the general health supervision and control of the district, will operate from the Centre.

Use of Army Huts for Temporary Housing of Non-Europeans. In view of the extreme shortage of housing for non-Europeans, the City Council negotiated with the Union Defence Force authorities to obtain the use of certain disused army huts, together with their ablution and sanitary blocks situated on Municipally-owned land, for the temporary accommodation of shack-housed non-Europeans, but the proposition was unacceptable to the Defence Department.

Housing of Natives. Existing Native housing comprises the following :

(a) Municipal villages and hostels;
(b) Industrial compounds;
(c) Private residential premises; and
(d) Shack settlements.

Municipal Native Housing comprises :

1. **Accommodation:**

(a) **Locations Housing Native Families:**

Lamont	480	houses.
Baumanvlle	120	do.
Jacobs	64	do.
Chesterville (Blackhurst)	940	do. (completed out of total complement of 1,268 to be erected).

(b) **Locations for Native Males:**

Somtseu	3,674	beds.
Dalton Road	1,656	do.
Jacobs	625	do.

(c) **Hostels for Native Males :**

Bell Street	1,374	beds.
Ordnance Road	440	do.

(d) **Hostels for Females :**

Grey Street	520	beds.
Jacobs	64	do.

2. **Water Supply—Locations:**

	Locations.			
	Lamont	**Baumanville**	**Jacobs**	**Chesterville (Blackhurst)**
Houses with water laid on	100	120	—	See note at end of paragraph.
Homes with communal supply	380	—	64	
No. of communal taps	31	—	4	

3. **Ablution, Washing and Sanitary Facilities:**

	Lamont	**Baumanville**	**Jacobs**	**Chesterville (Blackhurst)**
Houses with showers	100	120	—	See note at end of paragraph.
Houses with bathrooms	380	—	—	
Showers for males	—	—	6	
Showers for females	—	—	6	
Washing gullies	380	120	2	
Latrines (pail)	100	—	—	
Latrines (pit)	380	—	—	
Latrines (water borne)	—	120	—	
Latrines for Males	—	—	6	
Latrines for females	—	—	6	

At Lamont, the provision of full sewerage facilities to houses, offices and staff quarters has been authorised by Council.

In the Chesterville Location, each house is equipped with water-borne drainage and provided with a bathroom, shower, water-closet and an ample supply of water for domestic purposes.

During the year the Jacobs Location was connected to the sewerage system and all pail privies eliminated.

A new laundry has been erected at Baumannville, thus eliminating the old unhygienic method of laundering washing in the homes of tenants.

4. (a) **Hostels for Males:**

	Somtseu Road	Dalton Road	Bell Street	Jacobs	Ordnance Road
Latrines	235	66	42	72	13
Urinals	13	6	7	54	—
Showers	216	38	38	48	9
Washing Areas	21	11	22	5	3
Water Taps	50	50	36	58	7
Fireplaces	62	26	15	16	15
Kitchens	10	5	—	1	—
Kitchen Taps	24	17	—	7	2
Dining Halls	3	2	—	1	—

(b) **Hostels for Females:**

	Grey Street	Jacobs
Latrines	37	5
Showers and baths	23	3
Washing areas	6	1
Water Taps	42	8
Fireplaces	36	4
Kitchens	1	—
Kitchen Taps	6	—
Dining Halls	1	—

A refuse removal service is also provided at all locations and hostels.

5. **Central Housing Board Schemes.** Of the above schemes, Lamont and Chesterville Locations have been financed by Central Housing Board loans. Lamont was completed in 1937 and Chesterville is nearing completion.

6. **Proposed Additional Accommodation:**

Lamont Location	182 houses.
Hostel for males — Merbank	5,000 beds.
Additions to Somtseu Road	250 „
Extensions to Jacobs	1,000 „

7. **Accommodation other than Municipal:**

(a) Industrial and Commercial (including S.A. Railways and Durban Corp.)	15,228
(b) Domestic servants	21,000
(c) Rented out by private individuals	2,265
(d) Shanty Settlements	21,976

Housing of Admiralty Natives. An agreement has been entered into whereby the Council will undertake to erect additional accommodation at Somtseu Road to house 512 Natives employed by the Admiralty.

Experimental Pise-de-terre Dwellings for Natives. Council has authorised the erection of four experimental wattle and daub or "pise-de-terre" dwellings, utilising Native labour, in order to explore the possibility of adopting this form of construction for the temporary housing of Natives in areas where basic sanitary and water services can be provided and suitable control can be exercised. In order that the practical policy of temporary housing may be explored, it is proposed to carry out an experiment designed to utilise, at low cost, locally-obtained materials for the erection of such dwellings by Native craftsmen, in their traditional style, suitably adopted and adjusted to satisfy elementary sanitary requirements. These temporary housing units will consist of four two-roomed dwellings each equipped with its own cooking facilities and latrine but sharing a communal water supply and a combined ablution block which, however, affords separate bathing facilities for each family.

Conclusions :

(a) No improvement in the general housing position during the year can be recorded;

(b) Enactment of the Housing (Emergency Powers) Act and Regulations offer hope that traditional and obsolete methods of tackling the housing problem will be superseded;

(c) The rate at which new housing can be provided, even under the most favoured circumstances, indicates that the majority of slum dwellers will be compelled, for an indefinite period, to continue occupation of sub-standard housing;

(d) "Organisation of slums" on a temporary housing basis under proper supervision is essential as a safeguard to health, pending provision of new housing;

(e) Migration of Indian and Native families to the City derives from poor economic and social conditions in the rural areas and heralds the coming of the industrial age to South Africa;

(f) Unless the earning capacity of non-European workers can be improved, the burden of sub-economic housing may prove an insupportable burden on ratepayers;

(g) No progress has been made with the provision by land-owners of "basic sanitation" for their squatter tenants;

(h) Whilst the erection of unauthorised shack dwellings has to a considerable extent been curbed, widely dispersed minor outbreaks are still occurring; and

(i) The volume of new housing has not been able to keep pace with the demand, still less does it suffice to energise slum clearance; and

(j) The Town Planning Consultant's report on various aspects of the City Council's programme of Post-War Development should provide a valuable guide in the future planning of the City.

Appreciation. I wish to express my appreciation of the loyal service rendered by my staff, a considerable number of whom were kindly released during 1944, by the military authorities. My thanks are also conveyed to you, Sir, and to the other members of the City Council for courtesy and assistance extended to me throughout the past year.

I have the honour to be,

Ladies and Gentlemen,

Your obedient servant,

G. H. GUNN, M.D., Ch.B., D.P.H.
City Medical Officer of Health.